

PROJECT MANUAL

For

**Former ATCOM Facility
Abatement and Demolition
5701 Lincoln Way
St. Louis, Missouri**



**Land Reutilization Authority of the City of St.
Louis**

February 2012

INVITATION

The Land Reutilization Authority of the City of St. Louis ("Authority") will receive sealed bids for Former ATCOM Facility, Abatement and Demolition, St. Louis, Missouri ("Project").

A mandatory pre-bid conference will be held at **1:00 p.m. on February 24, 2012** at the offices of St. Louis Development Corporation, located at 1015 Locust Street, 12th Floor, St. Louis, Missouri, 63101. All questions asked during the pre-bid conference will be reduced to writing and written responses thereto will be circulated to all parties who have obtained copies of the Bid Documents from the Authority. All Bidders must attend this conference.

All bids are to be submitted pursuant to the terms and conditions in this Invitation, the Instructions to Bidders. The selected Bidder must be a qualified contractor licensed by the City of St. Louis. **The work required for the Project includes clearing and grubbing, wet demolition of a partially collapsed, wood-framed structure, and removal and proper disposal of approximately 34,000 square feet of spray-on asbestos insulation from the test firing stations and tunnels, as required by the attached Contract and the identified Drawings, Technical Specifications and other Bid Documents (collectively, the "Contract Documents").** The Bidders will familiarize themselves with the Project site prior to submission of bids.

Bids will be received by the Authority at 1015 Locust Street, 12th Floor, St. Louis, MO 63101, (Attention: Mr. Chadwick Howell) until 3:00 P.M. local time on March 16, 2012 at which time and place all bids shall be publicly opened. Potential Bidders may obtain all Bid Documents from the Authority at the following address:
<http://stlouis-mo.gov/sldc/procurement.cfm>.

A Certified Check or bank draft, payable to the Authority, or a satisfactory Bid Bond, executed by the Bidder and an acceptable Surety, in an amount equal to five (5) percent of the bid, shall be submitted with each bid. The bid security must be held for at least thirty (30) calendar days, or until the Contract is awarded to the successful Bidder. The bid security of any unsuccessful Bidder shall be returned to the Bidder within fifteen (15) calendar days after the Authority rejects the applicable bid.

Attention is called to the fact that no less than the minimum wages and salaries, as set forth in the Bid Documents, must be paid on this Project, and that the participating contractors shall insure that employees and applicants for employment are not discriminated against because of their race, creed, color, age, national origin, physical handicap, or sex, and shall take affirmative action in the employment of lower income residents of the City.

The work which the Contractor shall be required to perform under this Contract shall be commenced at the time stipulated by the Authority in the Notice to Proceed; **all work shall be scheduled and completed no later than June 29, 2012 as outlined in the Technical Specification. This schedule assumes no significant increase in volumes listed on the Bid Form.**

The maximum utilization of minority and women - owned business enterprises (MBE/WBE) will be sought for all work proposed in this Project, with goals of 25% minority-owned and 5% women-owned business enterprise utilization. Participating contractors must submit reports to

the Authority, on forms approved by the Authority, which demonstrate contractors' good faith efforts to achieve said goals.

In order to be eligible to bid, Bidders must submit complete and acceptable documentation and information as required in these Bid Documents. The Authority does not warrant that a Contract will be awarded based on the submitted bids. The Authority reserves the right to reject any and all bids, and the right to waive informalities in the bidding. In particular, the Authority reserves the right to reject any bid, notwithstanding its price, for any reason considered by the Authority to be relevant to the Bidder's potential performance, including but not limited to past performance on other projects, claims history, financial capacity and stability of the Bidder, workforce and management capability of performing the work within the required Time for Completion and consistent with the other requirements of the Contract Documents, relevant experience and qualifications (or lack thereof), the Bidder's willingness to execute the required Contract and any other information requested by or furnished in response to this Invitation in the attached Instructions to Bidders.

No bid shall be withdrawn for a period of ninety (90) calendar days subsequent to the opening of bids without the express written consent of the Authority.

Land Reutilization Authority of the City of St. Louis

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INSTRUCTIONS TO BIDDERS

1. USE OF SEPARATE BID FORMS

These Bid Documents (items as listed in the Index) include a complete set of Bid and Sample Contract Forms, which are for the convenience of Bidders and are not to be detached and filled out or executed. Separate copies of Bid Forms are furnished for that purpose.

2. INTERPRETATIONS

No oral interpretation will be made to any Bidder as to the meaning of the Bid Documents or any part thereof. Questions regarding any matter pertaining to the performance of the Project or the Bidder's response shall be made in writing to the St. Louis Development Corporation, acting on behalf of the **Land Reutilization Authority of the City of St. Louis**, (hereinafter called the "Authority"), 1015 Locust Street, 12th Floor, St. Louis, Missouri 63101, (Attention: Mr. Chad Howell). Replies will be issued and posted on the website at <http://stlouis-mo.gov/government/departments/sldc/procurement.cfm>. Questions received five (5) or more calendar days prior to the date fixed for opening of bids will be given consideration. Every interpretation made to a Bidder will be in the form of an Addendum to the Bid Documents, and when issued will be on file in the office of the Authority, at least three calendar days before bids are opened.

3. PRE-BID CONFERENCE

A mandatory pre-bid conference will be held at **1:00 p.m. on February 24, 2012** at the offices of St. Louis Development Corporation, located at 1015 Locust Street, 12th Floor, St. Louis, Missouri 63101. All questions asked during the pre-bid conference will be reduced to writing and written responses thereto will be circulated to all parties who have obtained copies of the Bid Documents from the Authority. All Bidders must attend this conference.

4. INSPECTION OF PROJECT SITE

Prospective Bidders are strongly encouraged to inspect the site prior to bidding. However, due to the deteriorated condition of the buildings and sheer volume of friable asbestos, **site inspections must be scheduled and conducted with the project Engineer, Mr. Bill Petroburger of Professional Environmental Engineers (3140-531-0060), who will advise Bidder regarding the appropriate level of Personal Protective Equipment that must be used in order to safely access the property.** In this regard, all prospective Bidders are directed to Section 7 of the General Conditions, which provides that the selected Contractor shall be responsible for, and shall bear all costs associated with, any conditions which are observed or are reasonably capable of observation pursuant to a thorough inspection of the Project site prior to execution of the Contract. A visit to the Project site to determine the site characteristics and the conditions under which the work will be performed will be critical to all Bidders. The day of the pre-bid conference may be the only opportunity to do so. The successful Bidder, by the execution of the Contract, shall in no way be relieved of any obligation due to its failure to review or examine any information made available to the Bidder prior to execution of the Contract, or its failure to visit the site and become fully acquainted with the conditions at the site. Pursuant to the Contract, the Contractor shall not be entitled to any claim

for any increase in the Contract Price, any extension of the Time for Completion or any other damages or relief based on facts which the Contractor could have noted upon a thorough examination of all accessible aspects of the site and/or a review of all available information prior to the execution of the Contract.

5. BID DOCUMENTS

A complete set of Bid Documents will be available for review Monday through Friday, from 9:00 a.m. to 5:00 p.m. at the following locations:

Land Reutilization Authority of the City of St. Louis
1015 Locust, Suite 1200
St. Louis, Missouri 63101
314-622-3400

MOKAN
5261 Delmar Boulevard, Suite B
St. Louis, MO 63108
314-454-9675
314-361-9806 (fax)
mokan@stlouis.missouri.org

Contractors Assistance Program (CAP)
6330 Knox Industrial Drive, Suite 101
St. Louis, Missouri 63139
314-645-3398
314-645-3899 (fax)
cap@stlouis.missouri.org

6. ALTERNATIVE BIDS

Alternative bids will not be considered, unless specifically requested in the Form of Bid Proposal (Bid Form).

7. BIDS

- a. All bids must be submitted in triplicate on forms supplied by the Authority and shall be subject to all requirements of the Bid Documents, including the Contract, the Drawings, Technical Specifications and these INSTRUCTIONS TO BIDDERS. All Bids must be regular in every respect and no interlineations, excisions or special conditions shall be made or included in the Bid Form by the Bidder. However, the Authority reserves the right to waive informalities in the bidding, in the sole discretion of the Authority.
- b. Bid Documents, including but not limited to the Bid, the Bid Guaranty, the Non-Collusive Affidavits and Bidder's Qualifications, shall be enclosed in a SEALED envelope labeled with the words "**Former ATCOM Facility, Abatement and Demolition, St. Louis,**" as well as the name of the bidder and date and time of Bid Opening, in order to guard against premature opening of bid.

- c. The Authority may consider as irregular any bid on which there is an alteration of or departure from the Bid Form hereto attached, and, in its sole discretion, may reject any Bid or Bids, so altered or changed.
- d. The Authority shall interpret the Contractor's act of submitting a bid proposal to the Authority to mean that the Contractor has satisfied itself as to the quantities and has ascertained at the site by inspection, investigation, measurement, or otherwise, all circumstances affecting the cost of performing the work.

8. BID GUARANTY

- a. The Bid must be accompanied by a Bid Guaranty which shall equal five (5) percent of the amount of the Bid, and at the option of the Bidder, may be Certified Check, Bank Draft, or a Bid Bond secured by a guaranty or a surety company listed in the latest issue of U.S. Treasury Circular 570. The amount of such Bid Bond shall be within the maximum amount specified for such company in said Circular 570. The practice of multiple sureties joining together to issue a satisfactory Bond, shall not be allowed. No Bid will be considered unless it is so guaranteed. Certified Check or Bank Drafts must be made payable to the order of the **Land Reutilization Authority of the City of St. Louis**. Cash deposits will not be accepted. The Bid Guaranty shall ensure the execution of the contract and the furnishing of Performance and Payment Bond by the successful Bidder, all as required by the Bid Documents. Bid Bonds must be submitted in triplicate.
- b. Revised bids, if representing an increase in excess of two (2) percent of the original bid, must have the Bid Guaranty adjusted accordingly; otherwise the original bid shall remain in force.
- c. In case the Bid Guaranty is in the form of a Certified Check or Bank Draft, the Authority may make such disposition of the same as will accomplish the purpose for which submitted.

9. NON-COLLUSIVE AFFIDAVIT

Each person or corporation submitting a bid for the work contemplated in the Bid Documents, shall execute an affidavit in the form herein provided, to the effect that is has not colluded with any other person, firm or corporation in regard to any bid submitted. Such affidavit shall be attached to the bid in triplicate.

Before executing any subcontract, the successful Bidder shall submit the name of any proposed subcontractor for prior notification, with an attached executed Non-Collusive Affidavit of Subcontractor form, provided herein.

10. BIDDER'S QUALIFICATIONS

The Authority shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform the work and the Bidder shall furnish the Authority all such information and data for this purpose, as the Authority may request. The Authority reserves the right, in its sole, unrestricted discretion to reject any bid where an investigation of the evidence or information does not satisfy the Authority that the Bidder is qualified to carry out properly the terms of the Bid Documents.

11. CORRECTIONS

Erasures or other changes in the Bid Forms must be explained or noted over the signature of the Bidder. Failure to comply with this may result in the disqualification of the bid submitted.

12. TIME FOR RECEIVING BIDS

- a. Bids received prior to the advertised hour of opening will be kept sealed. The representative of the Authority whose duty it is to open them will decide when the specified time has arrived, and no bid received thereafter will be considered. Notwithstanding the foregoing, when a Bid arrives by mail after the time fixed for opening, but before the reading of all other Bids is completed, and it is shown to the satisfaction of the Authority that the non-arrival on time was due solely to delay in the mail service for which the Bidder was not responsible, such bid will be received and considered. The Authority will not be responsible for the premature opening of a Bid not properly addressed and identified.
- b. Bids or mid modifications received by facsimile will not be considered.
- c. Bidders are cautioned to allow ample time for transmittal of bids by mail or otherwise. Bidder should secure correct information relative to the probable time of arrival and distribution of mail at the place where bids are to be opened; and, so far as practicable, make due allowance for possible delays in order to avoid the necessity for investigations of claims that such delays in receipt of bids were due solely to delay in the mail, as provided for in this section.

13. OPENING OF BIDS

At the time and place fixed for the opening of bids, the Authority will cause to be opened and publicly read aloud, every bid received within the time set for receiving bids, irrespective of any irregularities therein. Bidders and other persons properly interested may be present, in person or by representative.

14. WITHDRAWAL OF BIDS

Bids may be withdrawn by written request dispatched by the Bidder in time for delivery in the normal course of business prior to the time fixed for opening; provided that written confirmation is placed in the mail and postmarked prior to the time set for bid opening. The Bid Guaranty of any Bidder withdrawing his bid in accordance with the foregoing conditions will be promptly returned. Negligence on the part of the Bidder in preparing his bid confers no right of withdrawal or modification of his bid after such bid has been opened.

15. REJECTION OF BIDS

- a. The Authority reserves the right to reject the bid of any Bidder for any reason considered by the Authority to be relevant to the Bidder's potential performance. This includes, but is not limited to, the Bidder's past performance on other projects, claims history, financial capacity and stability of the Bidder, relevant experience and qualifications (or lack thereof), availability of qualified personnel to supervise, manage and perform the work, existence of adequate bonding and insurance, past payment history of the Contractor

with respect to subcontractor obligations and other bills for materials, supplies, labor or related services, Bidder's willingness to execute the required Contract, the Bidder's ability to conform to the requirements of the Contract, Drawings, Technical Specifications and other Contract Documents and the Authority's assessment of whether the Contractor is capable of performing the work in a full, timely, complete and proper fashion, and any other information requested by or furnished in connection with this Invitation. In determining which Bidder, if any, the Authority concludes is the lowest responsible, responsive Bidder, the following elements, in addition to those above mentioned, will be considered: (1) the size, manpower resources and business structure of the Bidder and its capacity to perform the work; (2) whether the Bidder has adequate equipment available to do the work properly and expeditiously and in conformance with the Contract requirements; (3) whether the Bidder has suitable financial resources to meet the obligations incidental to the work; (4) whether the Bidder has appropriate technical experience; and (5) whether the bidder meets the EEO and MBE/WBE goals of the Contract.

- b. Based on the nature of the work to be performed, and the technical requirements, experience and capacity necessary in connection with UST removal, environmental remediation and related work required by the Contract, the Authority will evaluate each bid by determining the specific entity and individuals who will be performing the work on the Project. The Authority reserves the right to reject any Bidder as unqualified, if it proposes to perform the work principally through other companies who will participate in the bidding as a partner or joint venture with the Bidder.
- c. Each Bidder is required to provide a Performance Bond and Payment Bond as set forth in the Contract. In assessing the qualifications, responsibility and responsiveness of a Bidder, the Authority may consider whether the entity submitting the bid is capable of providing the Performance and Payment Bond in its own name, or instead is providing bonding or insurance through an affiliation with another entity.
- d. Other data required by the Bid Documents includes (but is not limited to) the submittals related to the City's MBE/WBE program as described in this "Instructions to Bidders", the MBE/WBE Index and Submission Instructions and the MBE/WBE forms included in this specification.

16. AWARD OF CONTRACT

The work required for the Project includes clearing and grubbing, wet demolition of a partially collapsed, wood-framed structure, and removal and proper disposal of approximately 34,000 square feet of spray-on asbestos insulation from the test firing stations and tunnels. The Authority has a limited budget for the performance of this work. Accordingly, each Bidder is requested to provide a grand total, lump sum bid for the activities. It is understood by the Authority that certain unknown site conditions may affect the final Project cost. The successful Bidder and the award of a Contract, however, will be based on the grand total bid, together with the other factors identified herein, and will be the result of the Authority's overall determination as to the lowest, responsible and responsive Bidder, considering, among other things, not only cost but adherence to specifications, past performance of the Bidder and such other factors as have been identified herein. The selected Bidder to whom an award is made will be notified at the earliest practicable date. The Authority however, reserves the right at its sole discretion to reject any and all bids and to waive any informality in the bids received. This includes, but is not limited to, the failure of a bidder to make reasonable good faith efforts to demonstrate the ability to meet the City's MBE/WBE goals prior to bid opening.

17. PERFORMANCE AND PAYMENT BOND; EXECUTING OF CONTRACT

- a. Subsequent to the award and within five working days after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver to the Authority the Contract, in the form attached hereto.
- b. Having satisfied all conditions of award as set forth elsewhere in these documents, a successful Bidder shall, within the period specified in Paragraph "a" above, furnish a Performance and Payment Bond in a penal sum of at least 100% of the amount of the Contract as awarded, as security for the faithful performance of the Contract and for the payment of all persons, firms, or corporations to whom the successful Bidder may become legally indebted for labor, materials, tools, equipment, or services of any nature, including utility and transportation services, employed or used by him in performing the work. Such Bond shall be in substantially the same form included in the Bid Documents and shall bear the same date as, or a date subsequent to, the date of the Contract. This Bond shall be signed by a guaranty or a surety company listed in the latest issue of U.S. Treasury Circular 570 and the penal sum shall be within the maximum specified for such company in said Circular 570.

The practice of multiple sureties joining together to issue a satisfactory Bond, shall not be allowed.

- c. On each Bond, the rate of premium shall be stated, together with the total amount of the premium charged. The current power of attorney for the person who signs for any surety company shall be attached to such Bond.
- d. The failure of the successful Bidder to execute the Contract in the form attached hereto and to supply the required Bond within five working days after the prescribed forms are presented for signature, or within such extended period as the Authority may grant based upon reasons determined adequate by the Authority, shall constitute a default, and the Authority may either award the Contract to the next lowest responsive Bidder or re-advertise for bids, and may charge against the Bidder the difference between the amount of the bid and amount for which a Contract for the work is subsequently

executed, irrespective of whether the amount thus due exceeds the amount of the Bid Guaranty. If a more favorable bid is received by re-advertising, the defaulting Bidder shall have no claim against the Authority for a refund.

18. WAGES AND SALARIES

- a. The contract resulting from this opportunity is subject to the Davis-Bacon Act, as amended (40 U.S.C. 276a to a-7) and as supplemented by Department of Labor regulations (29 CFR part 5, "Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction"). Under this Act, contractors shall be required to pay wages to laborers and mechanics at a rate not less than the minimum wages specified in a wage determination made by the Secretary of Labor. In addition, contractors shall be required to pay wages not less than once a week. The current prevailing wage determination issued by the Department of Labor is provided in Appendix F-5.
- b. This Contract is subject to State of Missouri Prevailing Wage Laws. Not less than the prevailing wage rate must be paid to all workers performing work under this Contract. The contractor will forfeit a penalty of \$100 per day (or portion thereof) if a worker is paid less than the prevailing wage rate for any work done under this Contract by the contractor or subcontractor. Missouri prevailing wages are provided in Appendix F-5.

For more information, refer to Chapter 290 ("Wages, Hours and Dismissal Rights") of the Missouri Revised Statutes which is available online at:

<http://www.moga.mo.gov/statutes/chapters/chap290.htm>.

Or, contact:

Missouri Dept. of Labor and Industrial Relations
Division of Labor Standards - Prevailing Wage Section
PO Box 449
Jefferson City, MO 65102-0449
573-751-3403
www.dolir.mo.gov/sl/prevailingwage
E-mail: prevailingwage@dolir.mo.gov

- c. Where the Federal and State rates differ for the same classification, the contractor is required to pay the higher rate.
- d. The rates of pay requirements set forth under the Bid Documents are the minimum rates to be paid during the life of the Contract. It is, therefore, the responsibility of Bidders to inform themselves as to the local labor conditions, such as the length of the work day and work week, overtime compensation, health and welfare contributions, labor supply and prospective changes or adjustments of rates.
- e. Any worker classification not included in Appendix C or Appendix D shall be brought to the Authority's attention immediately by the Bidder.
- f. Notwithstanding "a-e" above, no person shall be paid less than that required by the City of St. Louis' "Living Wage" as contained in Ordinance 65597.

19. EQUAL EMPLOYMENT OPPORTUNITY

- a. Contractor agrees that in performing under this Contract neither the Contractor nor anyone under Contractor's control will permit discrimination against any employee, worker, or applicant for employment because of race, marital status, color, age, religion, sexual orientation, familial status, disability, national origin or ancestry. Such action shall include but not be limited to any action to bar employ, upgrade, or recruit, expel, discharge, demote, or transfer; layoff, terminate, or create intolerable conditions; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
- b. Contractor, during its performance under this Contract, will in all printed or circulated solicitations, or other advertisement or publication for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive meaningful consideration for employment without regard to race, marital status, color, age, religion, sexual orientation, familial status, disability, national origin or ancestry. The Contractor will not make any inquiry in connection with prospective employment which expresses directly or indirectly any limitation, specification or discrimination because of race, marital status, color, age, religion, sexual orientation, familial status, disability, national origin or ancestry.
- c. Contractor will permit reasonable access by the Authority to such persons, reports, and records as are necessary for the purpose of ascertaining compliance with fair employment practices.
- d. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract, or to furnish information or permit his books, records, and accounts to be inspected, within twenty days from date requested, this Contract may be cancelled, terminated, or suspended in whole or part and Contractor may be declared ineligible for further Authority Contracts for a period of one year, by the option of the Authority. In the event this Contract is cancelled, terminated, or suspended for failure to comply with fair employment practices, the Contractor shall have no claims against the Authority for damages as a result of such cancellation termination or suspension.
- e. Contractor further agrees that these clauses ("a" through "d") on discrimination and equal opportunity practices in all matters of employment and training for employment will be incorporated by Contractor in all Contracts or agreements entered into with suppliers of materials or services, Contractors, and subcontractors and all labor organizations furnishing skilled, unskilled, and craft union skilled labor, or who may performed any such labor or services in connection with this Contract.
- f. Whenever the Contractor is sued or threatened with litigation by a subcontractor, vendor, individual, group or association, as a result of compliance with the clauses "a" through "e", of these provisions relating to fair employment practices, the Contractor shall notify the General Counsel of the Authority in writing of such suit or threatened suit within ten days.

20. MINORITY AND WOMEN-OWNED (MBE/WBE) BUSINESS ENTERPRISES:

The City of St. Louis is committed to involving Minority and Women-owned Business Enterprises (MBE/WBE) in meaningful roles. It is the policy of the Authority that MBE/WBE firms

shall have an equal opportunity to participate in the performance of this contract. The Mayor's Executive Order 28 has established goals of 25% MBE and 5% WBE participation. A Bidder who, in accordance with the documentation requirements of this specification, has achieved the 25% MBE and 5% WBE goals shall be in compliance with this specification.

The Authority will work with the City's Disadvantaged Business Enterprise (DBE) Program Office located at the St. Louis Airport to monitor M/WBE participation. A current directory containing the names of firms that have been certified as eligible to participate as MBE/WBEs on City contracts can be obtained from the DBE Program Office. The Authority will only count towards the MBE/WBE goals firms who, at time of Bid Opening, are certified by the DBE Program Office. Bidders should contact the DBE Program Office at 314-551-5000 to verify the status of a firm's certification. The MBE/WBE Directory is also accessible at www.mwdbbe.org.

A Bidder who cannot achieve the 25% MBE and 5% WBE goals must provide documentation of the reasonable good faith efforts to meet the goal(s) and request a waiver from the goal(s), as prescribed in this specification. In such an instance the Bidder must be able to demonstrate that the required "good faith efforts" were initiated prior to submittal of the Bid. If the Bidder cannot demonstrate such "good faith efforts" to the satisfaction of the Authority, the Bid will be rejected as non-responsive.

M/WBE forms and additional information are provided in Exhibit F-4.

- a. **Pre-Contract Award Obligations:** A bid, properly executed, shall certify that the bidder has undertaken the required good faith efforts to achieve the stated MBE/WBE goals. Each bidder will be required to submit the MBE/WBE Utilization Statement with its bid. Failure to submit the MBE/WBE Utilization Statement as required herein will result in the bid being rejected as non-responsive.

The apparent low bidder and all other bidders still desiring to be considered for contract award must submit the MBE/WBE Utilization Plan, the Subcontractor List, the Good Faith Efforts Report and Statement, a copy of the bid solicitation to all subcontractors and, where appropriate a request for waiver, within 48 hours after bid opening. Firms bidding as a joint venture must submit a fully executed copy of the joint venture Contract at this time. Failure to submit each of the aforementioned documents will render a bid non-responsive.

To establish a responsive bid, the bidder must either document (on the MBE/WBE Utilization Plan) how the proposed utilization achieves the stated goals, or document bidder's good faith efforts expended (on the Good faith Efforts Report and Statement) prior to bid opening. For the purpose of determining the degree of goal attainment, the bidder should refer to Section Four, "Public Works Contracts" of Mayor's Executive Order #28, attached as Exhibit F-3.

- b. **Requests for Waiver:** If the MBE/WBE Utilization Plan does not meet the project goals, the bidder shall seek a partial or total waiver of the project goals. The application for waiver for all or part of the project goals shall include full documentary evidence of the bidder's good faith efforts to meet the project goals and why the request for waiver should be granted. The application shall be in writing and submitted within 48 hours after bid opening. The application must include a narrative, affidavits or exhibits which verify the actions taken by the bidder to meet the project goals.

- c. **Post Contract Award Compliance:** Within fifteen (15) calendar days after the Pre-Construction Conference, fully executed copies of each MBE/WBE subcontract must be submitted to the Authority. If a bidder fails to submit the required documentation within the specified time period, the Authority may withdraw the notice of award and the bid security of that bidder may be forfeited to the Authority. In any event, the Authority will not issue a "Notice to Proceed" until the required documentation is submitted.

During construction the Contractor shall submit the Monthly MBE/WBE Utilization Report to the Authority. Changes to the approved MBE/WBE Utilization Plan will be considered by the Authority only for one of the following reasons:

1. The named MBE/WBE firm is unable to meet the delivery requirements of the construction schedule.
2. The named MBE/WBE firm is dilatory in complying with requirements of the Bid Documents.
3. The name MBE/WBE firm is prevented from performing due to bankruptcy, insolvency or otherwise.

The Contractor shall promptly report any and all proposed changes in the utilization of MBE/WBE firms to the Authority, in writing, using the Subcontractor or Supplier Substitution Form included as part of this specification.

- d. **Penalties:** If SLDC determines that a contractor or bidder has failed to comply with the City's program regarding utilization of minority and women's business enterprises, it shall report its finding to the Mayor.

The Mayor, pursuant to Article VII, Section 1 of the Charter, may subject the offending party to any or all of the following penalties and sanctions:

1. Withholding of contract award;
2. Suspension of contract;
3. Withholding of payments;
4. Rescission of contract based upon a material breach of contract pertaining to MBE and/or WBE participation;
5. Refusal to accept a proposal;
6. Disqualification of a bidder or contractor from eligibility for providing goods or services to the City for a period not to exceed one year;

21. NATURE OF THE BIDDER

Based upon the technical requirements of the Contract, Drawings and Technical Specifications and the requirements for the performance of **clearing and grubbing, wet demolition of a partially collapsed, wood-framed structure, and removal and proper disposal of approximately 34,000 square feet of spray-on asbestos insulation from the test firing stations and tunnels**, the Authority will assess each submitted bid by reviewing the specific persons and companies who will be performing the work. In this regard, if any Bidder is a joint venture, partnership or other affiliation of more than one company, the Bidder shall provide all information requested by the Authority to identify the precise nature of the partnership, joint venture or other affiliation (including but not limited to a copy of the written agreement establishing the joint venture, partnership or other affiliation), and shall identify precisely the persons who will be supervising the work, and performing each principal portion of it, and

identify which company will be the employer of such persons, identify the specific company that will be providing the Performance and Payment Bond and applicable insurance for the Project, and identify precisely which company will be providing the financial resources necessary for the performance of the work. In addition, any such Bidder shall provide complete and detailed financial information with respect to both companies so that the Authority may determine the financial capacity of each. In the event the selected Contractor is a joint venture, each member of the joint venture shall be jointly and separately liable to the Authority for the performance of the Contract and for any damages or other liabilities arising there under. In this regard, the Authority shall have the right, in its sole discretion, to enforce the Contract individually, severally and successively against any one of the participants in the joint venture without impairing or affecting the rights of the Authority against the other.

22. EMPLOYMENT OF UNAUTHORIZED ALIENS PROHIBITED

Prior to contract execution and as a condition of final award, the selected Contractor shall by sworn Affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with this project. The Contractor shall sign an Affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with this project pursuant to the provisions of Sections 285.525 through 285.555 of the revised Statutes of Missouri, 2000, as amended. Notice and instructions regarding the requirements of this provision are included in Exhibit F-6.

PROCESS

1. Pre-Bid

The Bidder must fulfill and document each of the following requirements:

- A. Any firm that intends to bid for the prime contract must have a notice of its intention delivered to the construction clearinghouse as soon as feasible, but no fewer than seven calendar days before the date on which the firm desires to have all quotes in hand. The notice may be delivered by fax or E-mail, but must be in writing. In addition, the notice must at a minimum contain the following:
1. The name, street address, mailing address if different from the street address, telephone and fax numbers and E-mail address of a contact person.
 2. An identification of specific items of work that the plan holder may subcontract, and
 3. Expressly encourage MBE/WBEs to quote those items.

This contact shall be recorded in the Monthly Follow-Through Report, EEO-2.

The clearinghouses are:

MOKAN (St. Louis CCAC)
5261 Delmar Blvd., Suite B
St. Louis, MO 63108
(314) 454-9675

Contractors Assistance Program (CAP)
6330 Knox Industrial Drive
St. Louis, MO 63139
(314) 621-3135

- B. Contact the organizations listed below and solicit assistance in obtaining minority workmen to be employed under the contract. These contacts shall also be recorded in the Monthly Follow-Through Report, EEO-2.

St. Louis Construction Orientation
Intake Center
1300 Convention Plaza
St. Louis, Missouri 63103 Phone: 621-3190

AGC Construction Training School (apprentices only)
6301 Knox Industrial Drive
St. Louis, Missouri 63139 Phone: 644-1525

- C. Register with appropriate agencies of the City of St. Louis ("City"). This applies also to partnerships and joint ventures.

- D. Be licensed to do business in the City. The Bidder may check with the following: License Collector, Room 104 City Hall, 1200 Market Street, St. Louis, MO 63103; Phone: 622-4528.
- E. Have paid all appropriate taxes before the Contract can be approved. The Bidder may contact the following: Collector of Revenue, Room 410 City Hall, 1200 Market Street, St. Louis, MO 63103; Phone: 622-3291.

Participants in partnerships and joint ventures additionally shall individually have complied with the above requirements.

2. Bid

Each Bidder shall submit, in triplicate (3 copies), the following: (See also the Form of Bid Proposal). **A bidder who fails to submit fully executed copies of each of the following may be deemed non-responsive.**

- A. Bid Proposal Form
- B. Bid Bond
- C. Non-Collusive Affidavit
- D. Bidder's Qualifications
- E. MBE/WBE Utilization Statement (see Exhibit F-4).

3. Pre-Award Requirements

Within 48 Hours Following Bid Opening all bidders still desiring to be considered for contract award **must** submit the following: **A bidder who fails to submit fully executed copies of each of the following may be deemed non-responsive.**

- 1. Subcontractor List
- 2. MBE/WBE Forms in Exhibit F-4 as applicable
- 3. Copy of Bid Solicitation to Subcontractors
- 4. Request for Waiver of MBE and/or WBE goals, if applicable
- 5. Executed Joint Venture Contract, if applicable

4. Pre-Award Conference

At the pre-award conference, the selected Bidder shall submit, in triplicate (3 copies), of the following: **A bidder who fails to submit fully executed copies of each of the following may be deemed non-responsive.**

- A. Certification of Agreed MBE/WBE Utilization
- B. Subcontractor Participation Form
- C. For each proposed Subcontractor with a subcontract in excess of \$500,000:

1. Contractor's Compliance Report.
2. Compliance Evaluation Form.

D. Bar Chart Construction Schedule

5. Award

Successful Bidder ("Contractor") shall submit the following:

- A. Executed Contract
- B. Executed Acknowledgement
- C. Performance and Payment Bond with Power of Attorney
- D. Required Insurance Certificates

6. Pre-Construction Conference

Contractor shall submit the following:

- A. Copies of all required permits
- B. Subcontractor approval package(s), which include the following:
 1. Executed Subcontractor Request for Approval Form
 2. Non-Collusive Affidavit executed by each subcontractor
 3. Required Subcontractor Insurance Certificates

7. Notice to Proceed

The Authority will not issue a notice to Proceed until fully executed copies of all MBE/WBE subcontracts are received.

8. Construction Phase

Contractor shall submit the following:

- A. For every partial payment request, including the initial request, the following reports must be submitted to the Authority:
 1. Periodic Estimate for Partial Payment, on an acceptable form.
 2. Record of Payments to Subcontractors, material Suppliers and other vendors, in triplicate (see Exhibit F-4).
 3. Weekly payroll documentation for Prime Contractor and all Subcontractors, in triplicate.
 4. Monthly Manpower Utilization Report.

5. All documentation and report needed to fully comply with the Executive Orders of the Mayor of the City of St. Louis (see Exhibit F-3).
 6. Partial lien waivers for the contractor and all subcontractors and suppliers, for the previous pay period.
- B. Final payment request with the following reports:
1. Required reports for partial payment request (see above paragraph).
 2. Executed Certificate and Release, in triplicate.
 3. MBE/WBE Final Report of Payments Report (see Appendix #2).
 4. Final lien waivers from contractor and all subcontractors and suppliers.
- C. Submit MBE/WBE Substitution Form if any subcontractor/supplier is being replaced on the project (see Exhibit F-4).

FORM OF BID PROPOSAL
FORMER ATCOM FACILITY, ABATEMENT AND DEMOLITION
ST. LOUIS, MISSOURI

Bidder: _____

Address: _____

City, State, and Zip Code: _____

Telephone Number: _____

Grand Total Bid: _____

TO: Land Reutilization Authority of the City of St. Louis
1015 Locust Street, Suite 1200
St. Louis, Missouri 63101
Attention: Mr. Otis Williams

1. **General.** The Bidder, having familiarized itself with the existing conditions in the area of the work affecting the cost of the work, with the Bid Documents, which included the Invitation, Instructions to Bidders, the Form of Bid Proposal, the Bid Guaranty requirements, the Form of Non-Collusive Affidavits, the Form of Contract, the Performance and Payment Bond requirements, the General Conditions, the Special Conditions, the Technical Specification, Bid Documents, and Drawings and Addenda, if any thereto, as prepared by the St. Louis Development Corporation (SLDC), 1015 Locust Street, 12th Floor, St. Louis, Missouri 63101, and the Engineers, hereby proposes to furnish at the price indicated on this Bid Proposal, all technical personnel, labor, materials, equipment and services required to perform and complete all work required for the **Former ATCOM Facility, Abatement and Demolition.**
2. **Qualifications.** For the undersigned's Proposal to be considered for award of the contract, the following qualification documents, executed where necessary, are submitted herewith:
 - a. Contractor's Qualifications, including AIA Document 305 signed by an officer of the company
 - b. If the Bidder is a partnership or joint venture, provide a copy of the partnership or joint venture Contract.
 - c. The number of years Contractor has been engaged in construction work of a similar nature to this project.

- d. List of full time on-site supervisory personnel to be engaged in the contract, their name, title, resumes, references, length of service with Contractor's company, specific experience including the size and dollar value of projects supervised for the on site supervisor who will be responsible for the work under this project. The identified supervisory official shall have complete authority to speak for and make commitments for the Contractor. The supervisory official shall have a minimum of five years experience in projects of similar size and scope, and submit a list of owner contacts for projects performed within that five (5) year period. It is expected that the identified supervisory official will be committed, full time, to the Project from award of the Contract through to completion. Failure to so commit the identified supervisory official shall subject the bid to rejection, at the sole discretion of SLDC.
- e. A complete list of contracts performed by the Bidder involving work similar in nature, scope or technical requirements to that required for this Project, including names, addresses, telephone numbers and contact persons of the owners.
- f. A complete list of contracts the Contractor has performed or entered into within the last five years, in excess of one million (\$1,000,000.00) dollars total value, including names, addresses, telephone numbers and contact persons of the owners and engineers involved in each such contract.
- g. With respect to any means, methods or procedures that are not specified in the Contract Documents, a detailed description of the means, methods or procedures that will be employed by the Bidder in connection with the performance of the work on the Project.
- h. Detailed project schedule for all work reflecting completion by September 30, 2012.
- i. Evidence of Contractor's ability to obtain Performance and Payment Bond as required by the Bid Documents, shown by a letter signed by the Contractor's bonding company.
- j. Evidence of Contractor's ability to obtain insurance as required by the Bid Documents, shown by a letter signed by the Contractor's insurance company; and addressing specifically each item under the Section 130, Submittals and Notifications, Part 1 – General, section 1.3(K): Insurance. In addition, each Bidder shall identify the broker who will procure all required insurance coverage for the Bidder, if the Bidder is successful, and the company or companies that will act as insurers in such event.
- k. Credentials and copies of licenses of the landfill site and operator to be used for waste materials/debris.
- l. Each Bidder shall:
 - i. submit with its Proposal, a notarized statement describing any citations and /or violations issued by any regulatory agency concerning performance on previous contracts,

- ii. briefly describe the circumstance(s) involving the job(s) and citation(s)/ violation(s) and involved persons and agencies,
- iii. discuss the outcome(s) of any violation(s), and
- iv. answer the question, "has your firm or its agents been issued a Stop Work Order on any project within the last 24 months?" If the answer to the questions is "yes", provide details as specified above.
- m. Each Bidder shall answer the question, "Are you now or have been in the past, a party to any litigation or arbitration arising out of your performance of any contract?" If the answer to the question is "yes", provide details as specified in (l) above. You shall describe any liquidated damages assessed against you within the last 24 months.

Failure to report properly or truthfully any of the required information in Section 2, Qualifications, shall be considered sufficient cause for SLDC's rejection of the submitted Bid. In addition, SLDC reserves the right to take such steps as it deems necessary to determine the ability of each Bidder to perform the work. The Bidder shall provide to SLDC such additional information and data for this purpose as SLDC may request. SLDC reserves the right to reject any bid or Bidder for any reason considered by SLDC to be relevant to the Bidder's potential performance, including but not limited to SLDC's investigation or consideration of the information submitted by such Bidder.

The Bidder has indicated, in figures, a Price for each of the separate items called for in the Proposal, and has shown the Gross Sum ("Total Bid") in the place indicated in the Proposal as the summation of said items.

In case of discrepancy between the Gross Sum shown in the Proposal and that obtained by adding the items of the work, the Bidder agrees that the sum of the items shall govern, and any errors found in said Sum may be corrected by SLDC.

Unbalanced proposals on which the prices for some items are out of proportion to the prices for other items will be considered as sufficient cause for the disqualification of a Bidder and the rejection of its proposal.

The Bidder agrees that SLDC may reject its bid for any or no reason and award the contract to another party, and hereby waives any claim of damages for same.

If written notice of acceptance of the above bid is mailed, transmitted, faxed, or delivered to the Bidder within ninety (90) calendar days after the opening thereof, or at any time thereafter before this bid is withdrawn, the Bidder agrees to execute and deliver a Contract in the prescribed form and to furnish the required bond and insurance within five working days after the Contract is presented to it for signature.

Security in the sum of _____ Dollars
 (\$ _____) in the form of _____
 is submitted herewith in accordance with the Instructions to Bidders.

Attached hereto is an affidavit of proof that the Bidder has not colluded with any person with respect to this bid or any other bid submitted for this Contract.

The Bidder has submitted or has enclosed financial and experience statements in accordance with the Bid Documents.

Receipt is hereby acknowledged of the following addenda:

<u>Addendum No.</u>	<u>Dated</u>	<u>Acknowledged</u>

3. **Prices.** The following price breakdown must be filled out for the purpose of bid evaluation and to establish a schedule of values for the work. Bidders are reminded that the goals of this project are:

- a) Clearing and Grubbing,
- b) Wet Demolition Abatement of Wood Portion of Proof House,
- c) Asbestos Removal in Concrete Portion of Proof House, and
- d) Asbestos Removal in Underground Firing Tunnels,

as funding will allow. **The Grand Total Bid will be used in determining the selected bidder, but it is likely that some bid items will not be included in the final contract.** It is mandatory that the bidder physically verify all quantities presented in Section 0105 – Summary of Work to ensure that the bidder's response is comprehensive and accurate. The bid prices shall include all labor, materials, overhead, profit, insurance, taxes, fees, permits, etc. to cover the finished work:

GRAND TOTAL BID: _____ **Dollars, \$**_____

Base Bid Item #1 – Clearing and Grubbing

\$_____

Base Bid Item #2 – Wet Demolition Abatement of Wood Portion of Proof House

\$_____

Base Bid Item #3 – Asbestos Removal in Concrete Portion of Proof House

\$ _____

Base Bid Item #4 – Asbestos Removal in Underground Firing Tunnels

\$ _____

The contractor is also requested to provide unit rates in the Schedule below for potential additional ACM that may be identified after bid submittal but prior to bid award:

UNIT RATE SCHEDULE

Material	Unit	Unit Rate
Pipe Insulation	LF	
Mudded Pipe Fitting	Fitting	
Transite	SF	
Floor Tile	SF	
Floor Tile/Mastic	SF	
Window Caulking/Glazing	LF	
Plaster	SF	
Fire Doors	Door	
Boiler Insulation	SF	
Heat Exchange Insulation	SF	
Floor Debris	SF	
Spray on Insulation	SF	

NOTES: LF - Linear Feet
SF - Square Feet

- 4. Landfills.** The names and addresses of the landfill facilities that will be used on the project are (use additional sheets as necessary):

Landfill #1

Name: _____

Address: _____

Phone No.: _____ Fax No.: _____

Landfill #2

Name: _____

Address: _____

Phone No.: _____ Fax No.: _____

Landfill #3

Name: _____

Address: _____

Phone No.: _____ Fax No.: _____

5. **Subcontractors.** The names and addresses of the major subcontractors who will be used on the project are (use additional sheets as necessary):

Name	Address	Specialty
a. _____	_____	_____
b. _____	_____	_____
c. _____	_____	_____
d. _____	_____	_____
e. _____	_____	_____

The undersigned further declares that it has carefully examined the Bid Documents, plans, specifications, and the job site, and has satisfied itself as to all quantities and conditions and understands that in signing this proposal, it waives all right to plead any misunderstanding regarding these documents and conditions.

The total fee proposed to accomplish all of the work indicated on the plans and specifications shall be reflected in the above line item breakdown. In the event that there is some doubt as to where a specific material or labor cost should be included, Contractor shall verify with SLDC or provide a written clarification as to the description of work included in a specific category. This proposal shall be binding on all of the heirs, successors, assigns, executors, and administrators of the undersigned.

BIDDER: _____

ADDRESS: _____

BY: (PRINT): _____

SIGNATURE: _____

TITLE: _____

FED. I.D. #: _____

DATE: _____

PHONE: _____ FAX: _____

Corporate Seal if a Corporation

ATTEST: _____

DATE: _____

NON-COLLUSIVE AFFIDAVIT

State of Missouri)
)SS
City of St. Louis)

_____being first duly sworn, deposes and says:

That he/she is _____
of _____,
_____, the party making the foregoing proposal or bid, that such proposal or bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived or agreed, directly, or indirectly, with any bidder or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought by Contract or collusion or communication or conference, with any person, to fix the bid price of affiant or of any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against the St. Louis Development Corporation, acting on behalf of the **Planned Industrial Expansion Authority** of the City of St. Louis, or any person interested in the proposed contract; and that all statements in said proposal of bid are true, that the prices quoted in the attached bid are fair and proper and not tainted by any collusion, conspiracy and connivance and place responsibility on, in addition to the bidder, its agents, representatives, owners, employees, or parties in interest.

Signature of Bidder:

By: _____
subscribed and sworn to before me this _____ day of _____
20____.

(Notary Public)

My Commission Expires: _____.

SAMPLE CONTRACT FORM

THIS CONTRACT, MADE THE _____ day of _____, 2012, by between _____ hereinafter called the "Contractor", and the **Land Reutilization Authority** of the City of St. Louis, hereinafter called the "Authority".

WITNESSETH: That the Contractor and the Authority, for the consideration stated herein, mutually agree as follows:

ARTICLE 1: The Contractor shall furnish all supervision, technical personnel, labor, material, machinery, tools, equipment and services, including utility and transportation services, and perform and complete all work required for **FORMER ATCOM FACILITY, ABATEMENT AND DEMOLITION, 2130 DR. MARTIN LUTHER KING JR. DRIVE, ST. LOUIS, MISSOURI.**

ARTICLE 2: The Contract Price. The Authority will pay the Contractor for performance of this Contract in current funds subject to additions and deductions as provided for in the "Changes in Work" Section, GENERAL CONDITIONS, the sum of _____ (\$ _____)

ARTICLE 3: The executed Bid Documents will consist of the following:

- a. This Contract
- b. Project Manual
- c. Signed Bid Proposal Form
- d. Bid Bond
- e. Non-Collusive Affidavit
- f. Non-Collusive Affidavit-Subcontractor
- g. Performance and Payment Bond

THIS CONTRACT, together with the other documents enumerated in Article 3 herein, which said other documents are as fully a part of the Contract as if hereto attached or herein repeated, form the Contract between the parties hereto. In the event that any provision of any component part of this Contract conflicts with any provision of any other component part, the provision of the component part first enumerated in this Article 3 shall govern, except as otherwise specifically stated.

IN WITNESS WHEREOF, the parties hereto have caused this Contract to be executed in _____ original copies on the day and year first above written.

SEAL:

**Land Reutilization
Authority of the City of St. Louis**

ATTEST:

BY:

TITLE:

Rodney Crim
Executive Director

APPROVED FOR LEGAL FORM AND ADEQUACY:

JACQUELINE HARRIS Assistant City Counselor

SEAL:

(Contractor)

ATTEST:

BY: _____
TITLE:

ACKNOWLEDGEMENT

STATE OF MISSOURI)
)SS
CITY OF ST. LOUIS)

On this _____ day of _____, 2012, before me appeared Rodney Crim to me personally known, who, being by me duly sworn, did say that he is the Executive Director of the **Land Reutilization Authority of the City of St. Louis**, a public body corporate and politic of the State of Missouri, and that the seal affixed to the forgoing instrument is the corporate seal of said corporation, and said instrument was signed and sealed in behalf of said corporation by authority of its Board of Commissioners, and said Rodney Crim acknowledged said instrument to be the free act and deed of said corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal in the City and State aforesaid, the day and year first above written.

Notary Public

My Commission Expires: _____

STATE OF MISSOURI)
)SS
CITY OF ST. LOUIS)

On this _____ of _____, 2012, before me personally appeared _____, to me personally known, who, being by me duly sworn, did say that he is _____ of _____, that the seal affixed to the foregoing instrument is the corporate seal of said corporation, and said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and said acknowledged said instrument to be the free act and deed of said corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal in the City and State aforesaid, the day and year first above written.

NOTARY PUBLIC

My Commission Expires: _____

GENERAL CONDITIONS

1. DEFINITIONS

Wherever used in any of the Bid Documents, the following meanings shall be given to the terms herein defined:

- a. The term "Contract" means the Contract executed by the Authority and the Contractor, of which the General Conditions form a part.
- b. The term "Authority", "Local Authority", or "Local Public Agency" means the St. Louis Development Corporation acting on behalf of the **Land Reutilization Authority** of the City of St. Louis, which is authorized to undertake this Contract.
- c. The term "Contractor" means the person, firm or corporation, partnership or joint venture, entering into the contract with the Authority to perform the work to be done under this Contract.
- d. The term "Contracting Officer" means the person within the Authority's organization duly authorized by the governing body thereof to administer contracts for and in the name of the Authority. It does not necessarily mean the person executing this Contract. The Authority will advise the Contractor of the name of the person or official who is designated as the Contracting Officer.
- e. The term "Engineer" means the Engineer in charge serving the Authority, its successor or any other person or persons designated or employed by the Authority for the purposes of directing or having charge of the work embraced in this Contract and/or having provided technical documents. The Authority will advise the Contractor of the name of the person or official who is designated as the Engineer.
- f. The term "Bid Documents" means and shall include the following: Executed Contract, Addenda (if any), Invitation for Bids, Instructions to Bidders, Signed Copy of the Bid, Form of Bid Bond, Form of Non-Collusive Affidavits, Form of Performance and Payment Bond, the General Conditions, the Exhibits, Special Conditions, Technical Specifications, the Drawings, and all other documents listed in the Index of Bid Documents.
- g. The term "Drawings" means the drawings listed under the "Schedule of Drawings", and/or included in the drawings obtained by the Contractor.
- h. The term "Technical Specifications" means that part of the Bid Documents which describes, outlines and stipulates the quality of any materials to be furnished: the quality of workmanship required; and the manner and methods to be employed in the work to be done under this Contract.
- i. The term "Addendum" or "Addenda" means any changes, revisions or clarifications of the Bid Documents which have been duly issued by the Authority to prospective Bidders prior to the time of receiving bids.
- j. The term "Work Day" shall refer to an eight (8) hour period, Monday through Friday, excluding federal holidays, beginning no earlier than 6:00 AM and ending no later than 5:00 PM.

2. COMMUNICATIONS

- a. All notices, demands, requests, instructions, approvals, proposals, and claims must be made in writing.
- b. Any notice to or demand upon the contractor shall be sufficiently given if delivered at the office of the Contractor stated on the signature page of the form of Bid Proposal (or at such other office as the Contractor may, from time to time, designate in writing to the Authority), or if deposited in the United States Mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph or delivery company for transmission, in each case addressed to such office.
- c. All papers required to be delivered to the Authority shall, unless otherwise specified in writing to the Contractor, be delivered to the office of the St. Louis Development Corporation, 1015 Locust Street, Suite 1200, St. Louis, Missouri 63101 (Attention: Chad Howell), and any notice to or demand upon the Authority shall be sufficiently given if so delivered or if deposited in the United States Mail in a sealed, postage prepaid envelope, or delivered with charges prepaid to any telegraph or delivery company for transmission to said Authority at such address, or to such representatives of the Authority or to such other address as the Authority may, from time to time, subsequently specify in writing to the contractor for such purpose.

3. SUPERINTENDENCE BY CONTRACTOR

- a. Except where the Contractor is an individual and gives his personal superintendence to the work, the Contractor shall provide a competent superintendent, (or more than one superintendent if double shifts are performed) satisfactory to the Authority and the Engineer, on the work at all times during working hours with full authority to act for it. The Contractor shall also provide an adequate staff for the proper coordination and expediting of work.
- b. The Contractor shall lay out its own work and it shall be responsible for all work executed by it under the Contract. It shall verify all figures and elevations before proceeding with the work and will be held responsible for any error resulting from its failure to do so.

4. SUBCONTRACTS

- a. The Contractor shall not execute a Contract with any subcontractor or permit any subcontractor to perform any work included in this Contract until it has submitted a non-collusive affidavit from the subcontractor in substantially the form provided, has submitted the subcontractor's insurance certificate, and has received written approval of such subcontractor from the Authority. Said approval shall in no way make the Authority liable for any act or deed, or result of the use of, the Contractor's subcontractor.
- b. No proposed subcontractor shall be disapproved by the Authority except for cause.
- c. The Contractor shall be fully responsible to the Authority for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by it.

- d. The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to require compliance by each subcontractor with all provisions of the Contract and Bid Documents.
- e. Nothing contained in the Contract shall create any contractual relation between any subcontractor and the Authority.

5. CONTRACTS

The Authority or other entities may award, or may have awarded, other contracts for additional work at or near the project area, and the Contractor shall cooperate fully with such other Contractors, by scheduling his own work with that to be performed under other Contracts as may be directed by the Authority. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other Contractor as scheduled.

The laws of the State of Missouri shall govern the interpretation and enforcement of this Contract.

This Contract constitutes the entire Contract between the parties with respect to the subject hereof and neither has been induced to make or enter into this Contract by reason of any oral or written Contract or representation other than as contained herein.

The failure of the Authority in any instance to insist upon strict performance of any of the terms hereunder or to exercise any rights conferred herein shall not be construed as a waiver or relinquishment to any extent of the right to assert or rely upon any such terms or rights on any future occasion.

Financial records, supporting documentation, statistical records and all other records pertinent to any activity under this contract shall be retained by the Contractor for a period of three (3) years from the date of final payment under this contract.

6. SCHEDULING AND COORDINATION OF THE WORK

- a. The Contractor shall be responsible for the proper scheduling of all work and for the coordination of the operations of all trades, subcontractors, or material persons engaged upon this Contract. It shall be prepared to guarantee to each of its subcontractors, the locations and measurements which they may require for the fitting of their work to all surrounding work.
- b. The Contractor shall coordinate all of the work under this Contract with work to be done by others.
- c. The Contractor shall conduct its work so as not to interfere with functioning of existing sewers. Extreme care shall be observed to prevent debris from entering existing sewers as a result of his work. This section "c" shall not apply to sewers which are currently unused, are not to be used in the future, and are to be demolished as part of this contract.
- d. The Contractor shall make allowance for and pay for all incidental and overhead expense of coordinating its work and work by others.

- e. The work must be scheduled and accomplished in stages as approved by the Engineer.

7. RESPONSIBILITIES OF CONTRACTOR

Except as otherwise specifically stated in the Bid Documents and Technical Specification, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, heat, power, transportation, superintendence, temporary construction of every nature, charges, levies, fees, permits, or other expenses and all other services and facilities of every respect and within the specified time.

If, through acts of neglect on the part of the Contractor, any other Contractor or any subcontractor shall suffer loss or damage on the work, the Contractor shall settle with such other Contractor or subcontractor by Contract or arbitration, if such other Contractor or subcontractor will so settle. If such other Contractor or subcontractor shall assert any claim against the Authority on account of any damage alleged to have been so sustained, the Authority will notify this Contractor, who shall defend at this own expense any suit based upon such claim, and, if any judgment or claims against the Authority shall be allowed, the Contractor shall pay or satisfy such judgment or claim and pay all costs and expenses in connection therewith.

Contractor acknowledges that the work is to be performed in strict conformance with all means, methods and procedures specified in the Contract Documents (including but not limited to any disposal procedures, wrecking or abatement methodologies or dust mitigation and control requirements set forth therein). Contractor agrees that alternative methods and procedures to those that are specified in the Contract Drawings will not be allowed, even if they are otherwise permitted by applicable law, regulation or industry practice. The Contract Price will not be increased, and the Time for Completion will not be extended, based on any claim by the Contractor that it expected or assumed it could employ different or alternative means, methods or procedures from those required by the Contract Documents, regardless of whether such different or alternative means, methods or procedures are or have been permitted on other projects (whether by the Authority or any other entity) or are or have been allowed by any applicable law or regulation or any industry custom, standard or practice.

In addition, Contractor acknowledges, that except for those means, methods or procedures that are specified in the Contract Documents, Contractor is solely responsible to develop, determine and implement such means, methods and procedures as are required to perform the work in a full, timely, complete and proper fashion, in accordance with all requirements of the Contract Documents and applicable law. In this regard, Contractor represents that it has visited the Project site, has examined carefully all of the Contract Documents, has reviewed all reports and other information relating to the conditions at the Project site that have been identified to the Contractor in connection with the solicitation or submission of the Contractor's bid and the negotiation of this Contract, and has made a reasonably thorough inspection of the Project site (during which inspection the Contractor has correlated its personal observations with the requirements of the Contract Documents and has acquainted itself with all physical and observable conditions under which the work will be performed). Based on the foregoing, the Contractor assumes responsibility for (and shall not be entitled to any increase in the Contract Price or extension of the Time for Completion or to any other damages or additional compensation based on) any conditions at the site that the Contractor reasonably should have anticipated or detected, based on the information made available to the Contractor prior to the execution of the Contract (including a reasonably thorough inspection of the Project site).

Specifically in this regard, Contractor acknowledges and agrees that the Contract Price will not be increased, and the Time for Completion will not be extended, based on any expectation or assumption by Contractor that any particular means, methods, procedures or sequences could be employed in connection with the work (other than those specified in the Contract Documents) if the reason such means, methods, procedures or sequences cannot be employed, is a condition that was observable by, or disclosed to, the Contractor prior to the execution of this Contract.

8 BID DOCUMENTS AND DRAWINGS

The Authority, if requested by the Contractor, will furnish the Contractor, without charge, up to six (6) copies of the Bid Documents, including Technical Specifications and Drawings. Additional copies requested by the Contractor will be furnished at cost.

9. JOB OFFICES

The Contractor may provide such job site offices as needed for this project at its sole expense. Authority must approve of its location on site.

10. PAYMENTS TO CONTRACTOR

i. Partial Payments

- a. The Contractor shall prepare its requisition for partial payment, as described in "Process" Section 8 (page 21), as of the last day of the month and submit it, with the required number of copies, to the Engineer for approval. The amount of the payment due the Contractor shall be determined by deducting from the total value of work complete to date, (1) ten percent (10%) of the total amount, to be retained until final payment and (2) the amount of all previous payments. The total value of work complete to date shall be based on the estimated quantities of work completed and on the unit price and lump sum amounts contained in the Bid Documents. Copies of all contractor and subcontractor invoices and documentation shall be available for inspection by the Engineer.

The Contractor, upon payment by the Authority, shall within ten (10) calendar days issue payment to all subcontractors and suppliers owed monies for that monthly payment period.

- b. Monthly or partial payments made by the Authority to the Contractor are monies advanced for the purpose of assisting the Contractor to expedite the work of construction. All material and completed work covered by such monthly or partial payments shall remain the property of the Contractor and he shall be responsible for the care and protection of all materials and work upon which payments have been made. Such payments shall not constitute a waiver of the right of the Authority to require the fulfillment of all terms of the Contract and the delivery of all work embraced in this Contract complete and satisfactory to the Authority in all details. Retainage on this Project may at the option of the Authority be reduced to five percent (5%), once the Project has reached a minimum of ninety-five percent (95%) completion.

ii. Final Payment

- a. After final inspection and acceptance by the Engineer and the Authority of all work under Contract, the Contractor shall prepare its requisition for final payment, as described in "Appendix to the Instructions to Bidders VIII" on page 24, which shall be based upon the carefully measured or computed quantity of each item of work at the applicable unit prices and/or lump sums stipulated in the Contract. Contractor and all subcontractors agree that the Authority's measured or computed quantities will control with respect to payment.

The total amount of the final payment due the Contractor under this contract shall be the amount computed as described above less all previous payments.

Final payment to the Contractor shall be made subject to its furnishing the Authority with a release in satisfactory form of all claims against the Authority arising under and by virtue of its contract, other than such claims, if any, as may be specifically excepted by the Contractor from the operation of the release as provided under Section 15 DISPUTES, GENERAL CONDITIONS.

- b. The Authority, before paying the final estimate, may require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment and services to the Contractor, if the Authority deems the same necessary in order to protect its interest. The Authority, however, may make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payments so made shall in nowise impair the obligations of any surety or sureties furnished under this Contract.
- c. Withholding of any amount due the Authority under the section entitled "Liquidated Damages" in the SPECIAL CONDITIONS, shall be deducted from the final payment due the Contractor.

iii. Withholding Payments

The Authority may withhold from any payment otherwise due the Contractor so much as may be necessary to protect the Authority, and if it so elects, may also withhold any amounts due from the contractor to any subcontractors or material dealers, for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the Authority and will not require the Authority to determine or adjust any claims or disputes between the Contractor and his subcontractors or material dealers, or to withhold any monies for their protection unless the Authority elects to do so. The failure or refusal of the Authority to withhold any monies from the Contractor shall in nowise impair the obligations of any surety of sureties under any bond or bonds furnished under this Contract. The Authority at its option and expense may additionally utilize escrow agents for the disbursement of funds, and/or make joint payments to contractor and subcontractor as it deems necessary.

The Authority may withhold an appropriate amount of payment of a monthly estimate if the Contractor should fail to comply with any of the requirements set forth in the Contract. In addition, if the Contractor employs the services of other persons to execute any specific portions of work included in this Contract, the Contractor shall make

Contract to make monthly payments thereto. If any person so employed presents to the Authority evidence that such monthly payments have not been made, whereupon an investigation reveals the evidence to be true, then the Authority may withhold payment to the Contractor until such time as a Contract, satisfactory to the Authority, has been reached between the Contractor and the person employed.

To ensure that the obligations under subcontracts awarded to subcontractors are met, the Authority will review the Contractor's efforts to promptly pay subcontractors, vendors or suppliers for work performed in accordance with the executed subcontracts. The contractor shall pay subcontractors, suppliers and vendors, including MBE/WBEs their respective subcontract amount within 10 calendar days after the contractor receives payment from the Authority for the items performed by the subcontractors. The contractor shall provide the subcontractors with a full accounting to include quantities paid and deductions made from the subcontractor's partial payment at the time the check is delivered. Failure to do so without cause may result in an amount equal to the amount owed the subcontractor, vendor or supplier, plus 10% of the amount, being withheld by the Authority from the contractor on the next partial payment. Said amount will continue to be withheld by the Authority until the subcontractor is paid the amount due plus interest equal to the prime rate plus 1.5%. Notification from the subcontractor that payment has been received will be required if this clause is invoked. The Authority may require the contractor to certify the amount paid to subcontractors.

iv. Payments Subject to Submission of Certificates

Each payment to the Contractor by the Authority shall be made subject to submission by the Contractor of all written certifications required of him and his subcontractors by the section entitled CONTRACTOR'S CERTIFICATES under GENERAL CONDITIONS, and as elsewhere required in the Bid Documents.

11. CHANGES IN THE WORK

- a. The Authority may make unilateral changes in the scope of the work required to be performed by the Contractor under the Contract, by making additions thereto, or by omitting work therefrom, without invalidating the Contract, and without relieving or releasing the Contractor from any of its obligations under the Contract or any guarantee given by it pursuant to the Contract provisions, and without affecting the validity of the guaranty bonds, and without relieving or releasing the surety or sureties of said bonds. All such work shall be executed under the terms of the original Contract unless it is expressly provided otherwise.
- b. Except for the purpose of affording protection against any emergency endangering life or property, the Contractor shall make no change in the materials used, or in the specified manner of work, or supply additional labor, services or materials beyond that actually required for the execution of the Contract, unless in pursuance of a written order from the Authority authorizing the Contractor to proceed with the change. No claim for an adjustment of the Contract Price, will be valid unless so ordered by the Authority in writing.
- c. If applicable unit prices are contained in the Contract (established as a result of either a unit price bid or a Supplemental Schedule of Unit Prices) the Authority may order the Contractor to proceed with desired changes in work, the value of such changes to be

determined by the measured quantities involved and the applicable unit prices specified in the Contract; provided that, the net value of all changes does not increase or decrease the original total amount shown in the Contract by more than ten percent (10%) in accordance with the section entitled UNIT PRICES under INSTRUCTIONS TO BIDDERS.

d. If applicable unit prices are not contained in the Contract, or if the total net change increases or decreases the total Contract Price more than ten percent (10%), the Authority shall, before ordering the Contractor to proceed with desired changes, request an itemized proposal from it covering the work involved in the change after which the procedure shall be as follows:

(1) If the proposal is acceptable the Authority will prepare the change order in accordance therewith for acceptance by the Contractor; and

(2) If the proposal is not acceptable and prompt agreement between the two parties cannot be reached, the Authority may order the Contractor to proceed with the work on a cost-plus-limited basis. A cost-plus-limited basis is defined as the net cost of the labor, materials, and equipment plus fifteen percent (15%) of said net cost to cover all overhead and profit, the total cost not to exceed a specified limit.

i. The net cost of the Contractor's labor is defined as: the basic hourly rate plus fringe benefits payments. The property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security taxes on this cost-plus-limited basis work will be included in the payment for overhead.

ii. The net cost of the materials used is defined as the actual cost of such materials delivered to the job site and incorporated in the work.

iii. The net cost of the equipment used is defined as the hourly operating cost of said equipment, times the actual time required to move equipment to and from the site of extra work (if necessary) plus the actual operating time spent on the extra work.

The hourly operating cost shall apply only to equipment that is already on the job. Equipment required to be brought to the job solely for this extra work will be paid for a minimum of one day operating time plus delivery charges.

iv. No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.

e. Each change order shall include in its final form:

(1) A detailed description of the change in work.

(2) The Contractor's proposal (if any) or a conformed copy thereof.

- (3) A definite statement as to the resulting change in the contract price and/or time.
- (4) The statement that all work involved in the change shall be performed in accordance with contract requirements except as modified by the change order.

12. CLAIMS FOR EXTRA COST

- a. If the Contractor claims that any instructions by Drawing or otherwise involve extra cost or extension of time, it shall, within ten calendar days after the receipt of such instructions, and in any event before proceeding to execute the work, submit its protest thereto in writing to the Authority stating clearly and in detail the basis of its objections. No such claim will be considered unless so made.
- b. Any discrepancies which may be discovered between actual conditions and those represented by the Drawings and maps shall at once be reported to the Authority and work shall not proceed except at the Contractor's risk, until written instructions have been received by it from the Authority.
- c. If, on the basis of the available evidence, the Authority determines that an adjustment of the Contract Price and/or Time is justifiable and equitable, the procedure shall then be as provided in Section 11, CHANGES IN THE WORK of the GENERAL CONDITIONS.

13. TERMINATION, LIQUIDATED DAMAGES, DELAYS, AND SUSPENSIONS

a. Termination of Contract.

(i) Cause: If the Contractor refuses or fails to prosecute the work with such diligence as will ensure its completion within the time specified in these Bid Documents, or as modified as provided in these Bid Documents, the Authority by written notice to the Contractor, may terminate the Contractor's right to proceed with the work. Upon such termination, the Authority may take over the work and prosecute the same to completion, by contract or otherwise, and the Contractor and his sureties shall be liable to the Authority for any additional cost incurred by the Authority in its completion of the work, and they shall also be liable to the Authority for liquidated damages for any delay in the completion of the work, as provided below. If the Contractor's right to proceed is so terminated, the Authority may take possession of and utilized in completing the work such materials, tool, equipment, and plant as may be on the site of the work and necessary therefore. Contractor shall not be relieved of liability for damages sustained by the Authority as a result of breach of this Contract by Contractor, and the Authority may withhold payment to the Contractor for the purpose of set-off until such time as the exact amount of damages due the Authority from the Contractor is determined.

(ii) Convenience: The Authority may additionally terminate this Contract at any time for any reason by notice in writing from the Authority to the Contractor. Said termination shall be effective immediately upon Contractor receipt of such notice. In the event of termination of this Contract by the Authority, Contractor shall be entitled to receive compensation for any satisfactory work completed by Contractor through the effective date of termination. In no event shall Contractor

have a claim for loss or profit damages in the event of termination hereunder. Rights to terminate hereunder shall be in addition to and without prejudice to any other right or remedy.

b. **Liquidated Damages for Delays.**

If the work is not completed by **June 29, 2012**, as required by Section 1, TIME FOR COMPLETION under SPECIAL CONDITIONS, including any extensions of time for excusable delays as herein provided, the Contractor shall pay to the Authority as fixed, agreed, and liquidated damages for each calendar day of delay, until the work is completed and accepted, the amount as set forth in Section 2, LIQUIDATED DAMAGES under SPECIAL CONDITIONS, and the Contractor and its sureties shall be liable to the Authority for the amount thereof.

c. **Excusable Delays.**

The Contractor shall not be charged with Liquidated damages for any delays in the completions of the work due:

(1) To any acts of the Government, including controls or restrictions upon, or requisitioning of materials, equipment, tools or labor by reason of war, National Defense, or any other national emergency;

(2) To any acts of the Authority;

(3) To causes not reasonably foreseeable by the parties to this Contract at the time of the execution of the Contract which are beyond the control and without the fault or negligence of the Contractor, including acts of God or of public enemy, acts of another Contractor in the performance of some other contract with the Authority, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones and other extreme weather conditions; and

(4) To any delay of any subcontractor occasioned by any of the causes specified in subparagraphs (1), (2), (3) and (4) of this paragraph "C" which directly affects the Contractor's ability to maintain his schedule.

Provided, however, that the Contractor promptly notifies the Authority within ten (10) calendar days in writing of the cause of the delay. Upon receipt of such notification, the Authority shall ascertain the facts and the cause and extent of delay. If, upon the basis of the facts and the terms of this Contract, the delay is properly excusable, the Authority shall extend the time for completing the work for a period of time commensurate with the period of excusable delay, only to the extent that said period of excusable delay directly affects the Contractor's ability to perform the work, and delays critical path activities necessary for project completion.

No payment, compensation or adjustment of any kind (other than the extensions of time provided for) shall be made to the Contractor for damages because of hindrances or delays from any cause in the progress of the work, whether such hindrances or delays be avoidable or unavoidable, and the Contractor agrees that it will make no claim for

compensation, damages or mitigation of liquidated damages for any such delays and will accept in full satisfaction for such delays said extension of time.

d. **Suspension of Contract:**

(1) The Authority may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for a period of time that the Authority determines appropriate for the convenience of the Authority.

(2) If the performance of all or any part of the work is, for an unreasonable period of time suspended, delayed or interrupted (i) by an act of the Authority in the administration of this contract or (ii) by the Authority's failure to act within the time specified in this contract (or within a reasonable time if not specified) an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this contract.

(3) A claim under this clause shall not be allowed unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of the final payment under the contract;

14. ASSIGNMENT OR NOVATION

The Contractor shall not assign or transfer, whether by an assignment or novation, any of its rights, duties, benefits, obligations, liabilities, or responsibilities under this Contract without the written consent of the Authority; provided, however, that assignments to banks, trust companies, or other financial institutions may be made without the consent of the Authority. No assignment or novation of this Contract shall be valid unless the assignment or novation expressly provides that the assignment of any of the Contractor's rights or benefits under the Contract is subject to a prior lien for labor performed, services rendered, and materials, tools, and equipment supplied for the performance of the work under this Contract in favor of all persons, firms, or corporations rendering such labor or services or supplying such materials, tools, or equipment.

15. DISPUTES

- a. All disputes arising under this Contract or its interpretation, whether involving law or fact or both, or extra work, and all claims for alleged breach of contract shall within ten (10) calendar days of commencement of the dispute, be presented by the Contractor to the Authority for decision. All papers pertaining to claims shall state the facts surrounding the claim in sufficient detail to identify the claim together with its character and scope.

In the meantime the Contractor shall proceed with the work as directed. Any claim not presented within the time limit specified within this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten calendar days of its commencement, the claim will be considered

only for a period commencing ten (10) calendar days prior to the receipt by the Authority of notice thereof.

- b. The Contractor shall submit in detail its claim and its proof thereof. Each decision by the Authority will be in writing and will be mailed to the Contractor by registered or certified mail, return receipt requested.
- c. If the Contractor does not agree with any decision of the Authority, it shall in no case allow the dispute to delay the work but shall notify the Authority promptly in writing that it is proceeding with the work under protest, and it may then except the matter in question from the final release.

16. TECHNICAL SPECIFICATIONS AND DRAWINGS

Anything mentioned in the Technical Specifications and not shown on the Drawings or shown on the Drawings and not mentioned in the Technical Specifications shall be of like effect as if shown on or mentioned in both. In case of difference between Drawings and Technical Specifications, the matter shall be immediately submitted to the Engineer and the Authority, without whose decision, said discrepancy shall not be adjusted by the Contractor, save only at its own risk and expense.

17. REQUESTS FOR INFORMATION

It shall be the responsibility of the Contractor to make timely requests of the Authority for any additional information not already in the Contractor's possession which should be furnished by the Authority under the terms of this Contract, and which the Contractor will require in the planning and execution of the work. Such requests must be submitted from time to time immediately as the Contractor becomes aware of the need for supplementary information and each shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay. Each request shall be in writing, and list the various items and the latest date by which each will be required by the Contractor. The first list shall be submitted within two weeks after Contract award and shall be as complete as possible at that time. The Contractor shall, if requested, furnish promptly any assistance and information the Engineer may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for any delay in its work or to others arising from its failure to comply fully with provisions of this Section.

18. MATERIAL AND WORKMANSHIP

- a. Unless otherwise specifically provided for in the Technical Specifications, all workmanship, equipment, materials and articles incorporated in the work shall be new and the best grade of the respective kinds for that purpose. Where equipment, materials, articles or workmanship are referred to in the Technical Specifications as "equal to" any particular standard, the Engineer shall decide the question of quality and equality.
- b. The Contractor shall furnish at the earliest possible time to the Authority and the Engineer for approval the manufacturer's detailed specifications for all machinery, mechanical and other special equipment, which it contemplates installing together with full information as to type, performance characteristics, and all other pertinent

information concerning all other materials or articles which the Contractor proposes to incorporate in the work. (See Section – SAMPLES, CERTIFICATES AND TESTS, GENERAL CONDITIONS).

- c. Machinery, mechanical and other equipment, materials or articles installed or used without such prior approval shall be at the risk of subsequent rejection.
- d. Materials specified by reference to the number or symbol of a specific standard, such as an ASTM standard, a Federal Specification or other similar standard, shall comply with requirements in the latest revision thereof and any amendment or supplement thereto in effect on the date of the bid opening, except as limited to type, class or grade, or modified in such reference. The standards referred to, except as modified in the Technical Specification, shall have full force and effect as though printed therein.
- e. The Authority may require the Contractor to dismiss from the work any such company or employee or employees as the Authority or the Engineer may deem incompetent, or careless, or insubordinate, or otherwise detrimental to the satisfactory completion of the project. In no event shall any entity or individual have a claim for loss or profit damages in the event of termination hereunder.

19. SAMPLES, CERTIFICATES AND TESTS

- a. The Contractor shall submit to the Engineer all material or equipment samples, certificates, affidavits, etc., as called for in the Bid Documents or required by the Engineer, promptly after award of the Contract and acceptance of the Contractor's bond. No such material or equipment shall be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples or certificates have been approved in writing by the Engineer. Any delay in the work caused by later or improper submission of samples or certificates for approval shall not be considered just cause for an extension of the contract time.
- b. Each sample submitted by the Contractor shall carry a label giving the name of the Contractor, the project for which it is intended, and the name of the producer. The accompanying certificate or letter from the Contractor shall state that the sample complies with contract requirements, shall give the name and brand of the product, its place of origin, the name and address of the producer, and all specifications or other detailed information which will assist the Engineer in passing upon the acceptability of the sample promptly. It shall also include the statement that all materials or equipment furnished for use in the project will comply with the samples and/or certified statements. Certifications and tests to prove conformance with the Technical Specifications shall be furnished and paid for by the Contractor, as requested by the Authority.
- c. Approval by the Engineer (in conjunction with the Authority and its design team) of any materials shall be general only and shall not constitute a waiver of the Authority's right to demand full compliance with Contract requirements. After actual deliveries, the Engineer will have such check tests made as it deems necessary in each instance and may reject materials, equipment and accessories for cause, even though such materials and articles have been given prior general approval. If materials, equipment or accessories which fail to meet check tests have been incorporated in the work, the Engineer will have the right to cause their removal and replacement with proper materials or to demand and secure such reparation by the Contractor as is equitable.

- d. Except as otherwise specifically stated in the Contract, the costs of sampling and testing will be divided as follows:
 - (1) The Contractor shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes, or as directed by the Engineer to be taken except those samples taken on the project by the Engineer;
 - (2) The Contractor shall assume all cost of re-testing materials which fail to meet contract requirements;
 - (3) The Contractor shall assume all costs of testing materials offered in substitution for those found deficient; and
 - (4) The Authority will pay all other expenses.

20. PERMITS AND CODES

- a. The Contractor shall give all notices required by and comply with all applicable laws, ordinances, and codes of federal, state, and local governments. All environmental abatement, remediation, demolition and construction work and/or utility installations shall comply with all applicable ordinances and codes, including all written waivers. Before installing any work, the Contractor shall examine the Drawings and Technical Specifications for compliance with applicable ordinances and codes and shall immediately report any discrepancy to the Authority. Where the requirements of the Drawings and Technical Specifications fail to comply with such applicable ordinances or codes, the Authority will adjust the Contract by Change Order to conform to such ordinances or codes (unless waivers in writing covering the difference have been granted by the governing body or department) and make appropriate adjustment in the Contract Price or stipulated unit prices.

Should the Contractor fail to observe the foregoing provisions and proceed with the demolition, construction, and/or install any utility at variance with any applicable ordinance or code, including any written waivers (notwithstanding the fact that such installation is in compliance with the Drawings and Technical Specifications), the Contractor shall remove such work without cost to the Authority, but a Change Order will be issued to cover only any excess cost the Contractor would have been entitled to receive if the change had been made before the Contractor commenced work on the items involved.

- b. The Contractor shall at its own expense, secure and pay to the appropriate department of the local government the fees or charges for all permits, including permits for street pavements, sidewalks, sheds, removal of abandoned water taps, sealing of house connections, drains, pavement cuts, building, electrical, plumbing, water, gas, demolition, abatement, and sewer permits, and other permits as required by the local regulatory body or any of its agencies, including street and sidewalk easements and closings.
- c. The Contractor shall comply with applicable federal, state, and local laws and ordinances governing the disposal of surplus excavation, materials, debris, and rubbish

on or off the Project Area and commit no trespass on any public or private property in any operation due to or connected with the work embraced in this Contract.

- d. The Contractor shall pay for securing all permits, inspection deposits, and charges, required by the City of St. Louis and the Metropolitan St. Louis Sewer District, and notify all parties concerned before proceeding with the required work.

21. CARE OF WORK

- a. The Contractor shall be responsible for all damages to persons or property that occur as a result of its fault or negligence in connection with the prosecution of the work, and shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the Authority.
- b. In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorization from the Authority, is authorized to act at the Contractor's discretion to prevent such threatened loss or injury, and the Contractor shall so act. The Contractor shall likewise act if instructed to do so by the Authority. Any compensation claimed by the Contractor on account of such emergency work will be determined by the Authority as provided in the Section – CHANGES IN THE WORK under GENERAL CONDITIONS.
- c. The Contractor shall avoid damage as a result of its operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc., and it shall at its own expense completely repair any damage caused by its operations.
- d. The Contractor shall shore up, brace, underpin, secure, and protect as may be necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the work embraced in this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owner or other party before the commencement of any work. The Contractor shall indemnify and save harmless the Authority from any damages on account of settlements or the loss of lateral support of adjoining property, and from all loss or expense and all damages for which the Authority may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

22. ACCIDENT PREVENTION

- a. The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of its prosecution of the work. The safety provisions of applicable laws and building and construction codes shall be observed, and the Contractor shall take, or cause to be taken, such additional safety and health measures as the Contractor may determine to be reasonably necessary. Machinery, equipment and all hazards shall be guarded in accordance with the safety provisions of the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, Inc., to the extent that such provisions are

not in conflict with applicable laws. The Contractor shall comply with all pertinent provisions of the Contract Work Hours and Safety Standards Act as amended, commonly known as the Construction Safety Act, as pertains to health and safety standards, and all OSHA regulations and requirements.

- b. The Contractor shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. The Contractor shall promptly furnish the Authority with reports concerning these matters upon written request by the Authority.
- c. The Contractor shall indemnify and save harmless the Authority from any claims for damages resulting from personal injury and/or death suffered or alleged to have been suffered by any person as a result of any work conducted under this Contract.

23. SANITARY FACILITIES

The Contractor shall, as needed, furnish, install, and maintain ample sanitary facilities for all workers. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required by the sanitary codes of the State and local government. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations.

24. USE OF PREMISIES

- a. The Contractor shall confine its equipment, storage or materials, and construction operations to the areas described in the Technical Specifications and/or as shown on the Drawings and as prescribed by ordinances or permits, or as may be directed by the Authority, and shall not unreasonably encumber the site or public rights-of-way with its materials and construction equipment.
- b. The Contractor shall comply with all reasonable instructions of the Authority and the ordinances and codes of the local government, regarding signs, advertising, traffic, fires, explosives, danger signals, and barricades.

25. REMOVAL OF DEBRIS, CLEANING, ETC.

- a. The Contractor shall, periodically or as directed by the Engineer during the progress of the work, remove and legally dispose of all surplus material and debris, and keep the Project Area and public rights-of-way reasonably clear. Upon completion of the work, he shall remove all temporary construction facilities, debris and unused materials provided for the work, and put the project area and public rights-of-way in a neat and clean condition. Trash burning on the site will not be allowed.
- b. Upon completion of the work, or as directed by the Authority during the work, the Contractor shall remove all temporary offices, structures and facilities from the site, except for the fencing, the same to become his property, and leave the site of work clean and in the condition required by the Contract.

26. INSPECTION

- a. All materials and workmanship shall be subject to inspection, examination, or test by the Authority and the Engineer at any and all times during the work and at any and all places where such work is carried on. The Authority shall have the right to reject defective material and workmanship or require its correction. Unacceptable workmanship shall be satisfactorily corrected by the Contractor.

If the Contractor fails to proceed at once with the correction of rejected workmanship or defective material, the Authority may contract or otherwise have the defects remedied or rejected materials removed from the Project Area and charge the costs of the same against any monies which may be due the Contractor, without prejudice to any other rights or remedies of the Authority.

- b. The Contractor shall promptly furnish all materials reasonably necessary for any test which may be required. (See Section – SAMPLES, CERTIFICATES AND TESTS, under the GENERAL CONDITIONS, PART I.) All tests by the Authority will be performed in such manner as not to delay the work unnecessarily and shall be made as described in the Technical Specifications.
- c. Neither inspection, testing, approval nor acceptance of the work in whole or in part, by the Authority or its agents shall relieve the Contractor or his sureties of full responsibility for materials furnished or work performed not in strict accordance with the Contract.

27. REVIEW BY THE AUTHORITY

The Authority, its authorized representatives and agents, and representatives of any appropriately authorized government agencies shall, at all times have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this Contract, provided, however, that all instructions and approval with respect to the work will be given to the Contractor only by the Authority through its authorized representatives or agents.

28. DEDUCTION FOR UNCORRECTED WORK

If the Authority deems it not expedient to require the Contractor to correct work not done in accordance with the Bid Documents, an equitable deduction from the Contract Price will be made by the Authority and subject to settlement, in case of dispute, as herein provided.

29. INSURANCE

- a. The Contractor shall submit to the Authority for review and approval, evidence of its Workers Compensation, Commercial General Liability, Builder's Risk, and Auto Liability policies and shall similarly submit evidence of its Subcontractor's policies before each commences work. The policies shall be scheduled on an approved form and shall be kept in force until the Contractor's work is accepted and taken over by the Authority. Contracts of insurance (covering operations under this Contract) which expire before the Contractor's work is accepted and taken over by the Authority, shall be renewed and submitted to the Authority for its approval. All insurance policies carried during the life of this Contract must be true "occurrence" policies, and shall contain no sunset provision.

- b. The Contractor shall purchase and maintain and require his Subcontractors to purchase and maintain, in a Company or companies acceptable to the Authority, and name the Authority and others as additional insured on such, insurance as will protect from claims set forth below which may arise out of or result from the Contractor's operations under the Contract, whether the operations are performed by the Contractor or by any Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable.
1. Claims under Workers' Compensation and other similar laws which are applicable to the work to be performed.
 2. Claims for damages because of bodily injury, occupational disease or sickness, or death of the Contractor's employees.
 3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees.
 4. Claims for damages which are sustained by any person as a result of the following offenses: false arrest, libel, slander, invasion of privacy, discrimination, and other personal injuries.
 5. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom;
 6. Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle;
 7. Claims for damages because of employee dishonesty by any of the Contractor's employees.
 8. Claims involving contractual liability insurance.
- c. The insurance required shall be written for not less than the following, or greater if required by law:
1. Commercial General Liability – combined single limit for bodily injury and property damage of not less than \$1,000,000 each occurrence, \$2,000,000 annual aggregate. If the annual aggregate is exhausted, the contractor will be required to reinstate the limits.
- Such insurance shall include:
- a) Premises/Operations;
 - b) Independent Contractor's;
 - c) Products/Completed Operations to be maintained for two years after final payment;
 - d) Contractual Liability, including both written and oral contracts;
 - e) Personal Injury Liability;
 - f) Explosion, Collapse, and Underground Hazards;
 - g) Sudden and Accidental Pollution;
 - h) Delete Care Custody & Control Exclusion.

2. Comprehensive Automobile Liability:

Liability - \$1,000,000
Personal Injury Protection – Statutory
Uninsured Motorists – Statutory

3. Workers' Compensation – Statutory

Employer's Liability - \$1,000,000

4. Builders Risk

A "complete value" Form, issued for the full contract value as executed and amended from time to time, with a "waiver-of-occupancy" endorsement.

- d. Certificates of Insurance acceptable to the Authority shall be filed with the Authority within five (5) working days of the date of Notice of Award. These Certificates shall contain a provision that coverage afforded under these policies will not be cancelled, non-renewed, or materially changed until at least thirty (30) days prior written notice has been given to the Authority. The Certificates should include a positive statement evidencing that these coverage amounts are included.
- e. The minimum amount of coverage required or actual coverage carried shall not be construed to limit the liability of the contractor or subcontractor.
- f. All insurance policies shall be carried with financially responsible insurance companies which are licensed admitted carriers in the state of Missouri, covered under the guarantee fund, and approved by the Authority. All insurance companies must have the following minimum qualifications as rated in the most recent edition of the Best's Key Rating Guide:
 - 1. A rating classification of "A-" or better, and
 - 2. A financial size category of "Class XIII" or larger.

All such companies shall have representatives in the metropolitan St. Louis area.

- g. Due to the nature of and location of the work it is required that liability insurance policies name the **Planned Industrial Expansion Authority of the City of St. Louis**, the City of St. Louis, The State of Missouri, and the St. Louis Development Corporation, as Additionally Insured. All policies shall contain a Waiver of Subrogation in favor of these entities.
- h. The insurance required to be carried for this project shall be job specific, and the required coverage levels, including any annual aggregate, shall apply separately to this project. Certificates of Insurance shall specifically denote compliance with this requirement.
- i. The Contractor shall carry sufficient comprehensive insurance on its equipment at the site of work on route to and from site to fully protect the Contractor; the Contractor shall

require the same coverage of its Subcontractors. It is expressly understood and agreed that the Authority and Engineer shall have no liability for damage to equipment.

- j. The Contractor shall remain fully liable and responsible for all obligations under the Bid Documents, whether or not the insurance provided by the Contractor is approved by the Authority, and whether or not it is sufficient in amount, quality, or coverage to protect the Contractor against such liability, and shall pay and make good all such obligations to the full extent such insurance does not cover them.
- k. Any insurance carried by the Authority and the St. Louis Development Corporation, and their officers, agents, employees, successors and assigns which may be applicable, shall be deemed to be excess insurance, and the Contractor's and Subcontractor's insurance shall be deemed primary for all purposes despite any conflicting provision in the Contractor's and Subcontractors' policies to the contrary. The Contractor and Subcontractors must provide an endorsement to their insurance policies stating that their policies are primary.
- l. All insurance policies carried by the Contractor and/or all Subcontractors under this contract shall be presented in entirety to the Authority for review upon written or faxed notice from the Authority within a maximum of five (5) working days from the date of said notice.
- m. The liability policies of the Contractor and Subcontractor shall not contain any provisions which would exclude coverage for damage to that portion of any area where work is not occurring.
- n. The term Subcontractor shall mean any Subcontractor or Sub-subcontractor of any tier. All subcontractors must comply with all the provisions of Section 132. Insurance.
- o. To the fullest extent permitted by law, the Contractor and Subcontractors shall indemnify and hold harmless the entities in Paragraph "g.", and all agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the work including violation of any applicable environmental law, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including loss of use resulting therefrom, but only to the extent caused in whole or in part by negligent acts or omissions of the Contractor, Subcontractors, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this paragraph.

In claims against any person or entity indemnified under this paragraph by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this paragraph shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or Subcontractor under Workers' or Workmens' Compensation Acts, Disability Benefit Acts or other employee benefit acts.

- p. The Contractor shall identify upon written request by the Authority what loss control service its insurance carrier is providing.
- q. The Contractor and all Subcontractors will furnish a list of all claims on a quarterly basis which are related to work performed by them for the Authority and will arrange for meetings with the carriers to discuss specific claims if requested by the Authority. The Contractor and Subcontractors shall advise the Authority if an entity other than the carrier will handle claims.

30. INDEMNIFICATION

To the fullest extent permitted by law, the Contractor and Subcontractors shall indemnify and hold harmless all the entities enumerated under General Conditions in Section 29, Paragraph "g.", and all agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the work including violation of any applicable environmental law, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including loss of use resulting therefrom, but only to the extent caused in whole or in part by negligent acts or omissions of the Contractor, Subcontractors, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligations shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this paragraph.

In claims against any person or entity indemnified under this paragraph by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this paragraph shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or Subcontractor under Worker's or Workmen's Compensation Acts, Disability Benefit Acts or other employee benefit acts.

31. PATENTS

The Contractor shall hold and save the Authority, the St. Louis Development Corporation, and the City of St. Louis, their officers, and employees, harmless from liability of any nature of kind, including costs and expenses, for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured for use in the performance of the Contract, including its use by the Authority, unless otherwise specifically stipulated in the Technical Specifications.

32. WARRANTY OF TITLE

No material, supplies, or equipment for the work shall be purchased subject to any charted mortgage or under a conditional sale or other Contract by which an interest therein or in any part thereof is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work, and, upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by it to the Authority free from any claims, liens, or charges. No Contractor or any person, firm or corporation furnishing any material or labor for any work covered by this Contract shall have any right to impose a lien upon any structure, improvement or appurtenance thereon. Nothing contained in this paragraph, however, shall defeat or impair

the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection, or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the Authority. The provisions of this paragraph shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing materials for work when no formal contract is entered into for such materials.

33. GENERAL WARRANTY

Neither the final certificate of payment nor any provisions in the Contract nor partial or entire use of the clearance, improvements or products of the work embraced under this Contract by the Authority or the public or other recipient thereof shall constitute an acceptance of work not done in accordance with the Contract, or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of one (1) year from the date of final acceptance of the work. The Authority will give notice of defective materials and work with reasonable promptness.

34. SIGNS

Subject to prior approval of the Authority as to the size, design, type and location, and to local regulations, the Contractor or subcontractor may erect temporary signs for purposes of identification and controlling traffic. The Contractor shall furnish, erect and maintain the signs and signage as may be required by Safety Regulations and necessary to safeguard life and property. The Contractor shall furnish a bulletin board in prominent location in full view of its employees. The Contractor shall install standard steel "No Trespassing" signs every 100' on the construction fence, facing the exterior. Lettering on signage shall be not less than 9" in height.

35. LABOR / MANAGEMENT RELATIONS

The Contractor shall cooperate in connection with the coordination of working relationships between management and labor in the work included under this Contract, with appropriate labor organizations whose members may be or may become involved in such construction, subject to normal business consideration and all applicable Federal, State, and local laws, relating to labor/management relations, including the right of a majority of employees to designate a bargaining representative.

36. SALVAGE

The Contractor shall have the right to salvage building contents and materials. Salvage of building contents and materials shall in no way impact the schedule. Since the site and buildings cannot be fully secured from vandalism or theft, the Authority does not warrant that any building contents or materials, etc. present during walk through or at time of bid will be present for salvage at the time when demolition activities commence. On site sales of building contents or materials are expressly prohibited, as is access to the Demolition Area by the general public.

37. A.D.A. COMPLIANCE

The Authority does not discriminate against persons with disabilities. The Americans with Disabilities Act (A.D.A) prohibits discrimination based on disability. Contractors with the Authority must comply with the Act. The Authority may verify such compliance as it deems appropriate. Failure to comply with the A.D.A may result in the revocation of the contract.

38. PURCHASES EXEMPT FROM SALES TAX

Purchases of tangible personal property and materials to be incorporated into or consumed in the construction of this project are not subject to Missouri sales tax and may be made on a sales tax-exempt basis. Said purchases may not be made until a Notice to Proceed is forthcoming from the Executive Director of the Authority or his designee will furnish the Contractor awarded this contract an Exemption certificate authorizing such purchases for the project be on a sales tax-exempt basis. The Contractor shall forward a copy of the Exemption Certificate to all subcontractors, and any contractor or subcontractor purchasing materials shall present a copy of such Exemption certificate to all material suppliers as authorization to purchase all tangible personal property and materials to be incorporated into or consumed in the construction of this project and no other on a sales tax-exempt basis. The purchasing contractor shall retain all invoices for property purchased under the Exemption Certificate for a period of five years from completion of the project.

The Exemption Certificate will remain in force until the expiration date indicated thereon. No purchasing contractor shall make any sales tax-exempt purchases for this project after the expiration date or any extension thereof. The Contractor will request in writing to the President of the Board of Public Service at least thirty (30) days prior to the expiration date in effect for the Exemption Certificate any extension to the expiration date that may be required to complete the project. Purchases made pursuant to this section shall be in accordance with all applicable laws and regulations including Section 144.062 of the Missouri Revised Statutes and Missouri Department of Revenue Administrative Regulation 12 CSR 10-3.388.

39. NOTICE TO PROPERTY OWNERS

The Contractor shall give due notice in writing at a reasonable length of time in advance of the work to all owners and occupants, and also to all persons who as agents, or otherwise, may be in charge of any building, or other property, streets, gas, or water pipes, conduits, tracks, or other utilities that may or might be affected by his operations and the Contractor shall allow all such persons or companies, ample time to take all such measurements as may be deemed necessary for the proper protection, or adjustment, of their property and shall not cause any hindrance to, or interference's with, any such persons, companies, or the employees thereof, engaged in carrying out such protection , or adjustment work.

40. SATURDAY / SUNDAY WORK

No work or labor shall be performed under this contract on Saturday or Sunday except in an emergency, or matter of urgent necessity arising in connection therewith, and the Authority, in its sole discretion, shall determine whether such emergency or necessity exists. Contractor shall submit, in writing, any request for work or labor to be performed under this contract on Saturday or Sunday to the Authority. The Contractor shall be responsible for any and all costs associated with the performance of any work or labor on Saturday or Sunday.

SPECIAL CONDITIONS

1. TIME FOR COMPLETION

- a. The work which the Contractor shall be required to perform under this Contract shall be completed no later than **June 29, 2012**. Any claims for extra days shall be made in writing to the Authority within ten (10) calendar days of Contractor's knowledge of the need for extra days, but in no case shall claims be made less than 10 calendar days prior to the completion date as established in the Notice to Proceed. It is anticipated that Notice-to-Proceed will be issued within 30 days after written approval from the Authority.
- b. **Commencement, Prosecution and Completion:** Work under this contract shall be started within a period of one week after date of written notice to proceed, and shall be completed within the required working time after such notice as set forth in the "Special Conditions, Time for Completion."

When applicable, contract time based on CALENDAR DAYS shall be the number of consecutive calendar days stated in the contract starting on the date indicated in the official "Notice to Proceed" letter including weekdays, Saturdays, Sundays and Holidays.

No work or labor shall be performed under this contract on Sunday, except in matters of emergency, and the Authority shall determine whether such an emergency or necessity exists. Saturday work will be permitted when reasonable effort has been made to perform work during the regular workweek and when, in the opinion of the Engineer, it is necessary. The Contractor shall notify the Engineer 48 hours in advance of his desire to perform work on Saturday so arrangements may be made for inspection of said work. The decision of the Engineer shall be considered as final.

In the event of failure on the part of the Contractor to complete the work within the time specified above, the Contractor shall pay the Authority, as liquidated damages the amount set forth in the Information for Bidders, for each day (Saturdays, Sundays and Legal Holidays excepted, unless otherwise specified in the contract) of delay until the work is completed and accepted.

In general, the Authority will suspend count of contract time for the following reasons:

1. STRIKES. Whether such strikes are now in existence or occur subsequent to the date of the contract.
2. Delays caused by delivery of equipment. Failure on the part of the Contractor to make timely submittals or to place orders in a timely manner will not be considered.
3. Act of God, fire, or other cause over which the Contractor has no control and could not reasonably anticipate.
4. If the contract work is weather sensitive, lost days due to weather will only be considered if such conditions are encountered that exceed or the 10-year National Weather Service average for said conditions and those conditions affect the current major operation of the project. Weather information will be documented on Bi-Weekly Progress Reports, which are prepared by the Project Engineer.

In case the final value of all work performed exceeds the original contract amount, an extension in the calendar days will be granted to the Contractor. The extension will be made by increasing the contract time in the same ratio as the total final cost of all work performed under the contract bears to the total amount of the original contract. For a combination of projects awarded as a single contract, the extension will be made in a similar manner and on the basis of the total final cost of the combination in relation to the total amount of the original contract. If it can be definitely established that the extra work was of such character that it required more time than is indicated by the money value, the actual number of calendar days required may be allowed.

2. LIQUIDATED DAMAGES

The Contractor and its Sureties shall be liable for and shall pay to the Authority one thousand dollars (\$1,000.00) as fixed, agreed and liquidated damages for each calendar day of delay from the completion date established in the Notice to Proceed, as is determined by the above Time for Completion, or as modified in accordance with Section 11, Changes in the Work under the General Conditions until such work is satisfactorily completed and accepted (final completion). Substantial completion/beneficial occupancy shall not alleviate the Contractor's liability for liquidated damages.

3. EQUAL EMPLOYMENT OPPORTUNITY – GENERAL

- a. In order to carry out the intent of all equal employment opportunity provisions, the Contractor shall, before the award of the Contract for the work herein, meet with the Authority's designee, to arrange for affirmative action by the Contractor and his Subcontractors, in employment, purchasing and the utilization of businesses and enterprises.
- b. Failure to provide for, and to carry out, such affirmative action programs shall be grounds for refusal to award the Contract, and/or for termination of the Contract by the Authority.
- c. Failure to provide to the Authority on forms furnished by the Authority, EEO monthly reports, shall be grounds for termination by the Authority.
- d. The Contractor shall also submit the following to the Authority at such times as requested by the Authority:
 - (1) a copy of the Contractor's Personnel Application Form;
 - (2) a definitive and detailed Job Description for each position utilized under the contract;
 - (3) a copy of the Pay Ranges and Salary Scales which the Contractor follows for each position;
 - (4) a copy of the Contractor's current personnel policies.
- e. The Contractor will make full effort and document said effort to recruit employees from within the boundaries of the City of St. Louis (with a special emphasis on areas within the City which are to be directly served by the project activity to be funded).

- f. The Contractor shall employ in a position a lower income area of resident if otherwise eligible for the position, and if that position is vacant.
- g. The Contractor shall maintain files on applicants for jobs, by job titles, a list of lower income residents who applied for jobs, and lists of City residents who applied for jobs, but were rejected and why they were rejected.

4. MAYOR'S EXECUTIVE ORDER

The Contractor shall comply with the Executive Order of The Mayor of the City of St. Louis, dated April 11, 1997, as reissued and extended, a copy of which is included in this manual and is part of the Bid Documents (see Appendix F-3).

5. WORK SAFE PLAN

The Contractor will be required to prepare and follow a formal written safety program for each major activity of work, which represents the preventative efforts that will be instituted by the Contractor to protect workers and others from accidents. This plan shall parallel the project schedule activity flow, and predetermine the hazards inherent with each activity, along with preventative measures that will be taken by the Contractor. The Contractor shall require all subcontractors to maintain a formal safety program, or follow the Contractor's program.

Contractor agrees to comply with all applicable federal, state and city laws, ordinances, rules and regulations for the safety of persons or property in the performance of the Work including, but not limited to, the requirements of the Occupational Safety and Health Act of 1970, and amendments and regulations promulgated and issued pursuant thereafter.

Contractor shall provide sufficient, safe, and proper facilities, labor and material needed for the access and inspection of Contractor's Work by the Authority and other subcontractors or consultants.

Contractor agrees to comply with the "Hazard Communications Standard" of the Occupational Safety and Health Administration. To the extent required by such standard, Contractor will adopt and implement a written hazard communication program to protect its employees and others from potential exposure of hazardous chemicals in its possession at the job site, warning and handling labels for such chemicals, and material safety data sheets for such chemicals to the Authority for its records upon written request by the Authority. Formal written safety programs shall additionally be provided to the Authority for its records upon written request by the Authority.

Contractor shall furnish a written designation of a representative responsible for implementation and enforcement of Contractor's safety program. This representative shall be at the site whenever contract work is being performed.

6. TEMPORARY FACILITIES

Temporary services and facilities, including utilities, construction and support facilities, security and protection will be the responsibility of the Contractor.

7. REPORTS AND DOCUMENTATION

The Contractor shall be required to deliver reports and documents to the Authority's onsite representative as required. Reports required include, but are not limited to, the following:

Daily Log Report

Weekly Manpower Report

Weekly Schedule Update

Worker Turnover Report/Weekly

Payroll Documentation and Certification /Prevailing Wage/Weekly

8. PROJECT MEETINGS

- a. Conduct weekly progress meetings at the Project Site. Notify the Authority and the Engineer of scheduled meeting dates. Coordinate dates of meetings with preparation of the payment request.
- b. Attendees: In addition to representatives of the Authority and the Engineer, each subcontractor, supplier, or other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
- c. Agenda: Review and correct or approve minutes of the previous meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the status of the Project.
 1. Contractor's Construction Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to insure that current and subsequent activities will be complete within the Contract time.
 2. Review the present and future needs of each entity, including the following:
 - a. Interface requirements.
 - b. Time.
 - c. Delays and their causes.
 - d. Sequences.
 - e. Status of submittals.
 - f. Deliveries
 - g. Off-site fabrication problems.
 - h. Access.
 - i. Site utilization.
 - j. Temporary facilities and services.
 - k. Hours of work.

- l. Hazards and risks.
 - m. Housekeeping
 - n. Quality and work standards.
 - o. Change orders.
 - p. Documentation of information for payment requests.
- d. **Reporting:** No later than 3 days after each meeting, Contractor shall prepare and distribute minutes of the meeting to each party present and to parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.
- e. **Schedule Updating:** Revise the Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue the revised schedule concurrently with the report of each meeting.

9. PROJECT SCHEDULE

- a. Bar-Chart Schedule: Prepare a fully developed, horizontal bar-chart-type, contractor's construction schedule; submit for Authority review prior to issuance of the Notice to Proceed.
 - 1. Provide a separate time bar for each significant construction activity per building. Provide a continuous vertical line to identify the first working day of each week.
 - 2. Within each time bar, indicate estimated completion percentage in 10 percent increments. As Work progresses, place a contrasting mark in each bar to indicate Actual Completion.
 - 3. Prepare the schedule on a sheet, or series of sheets, of stable transparency, or other reproducible media, of sufficient width to show data for the entire construction period.
 - 4. Secure time commitments for performing critical elements of the work from parties involved. Coordinate each element on the schedule with other construction activities; include minor elements involved in the sequence of the Work. Show each activity in proper sequence. Indicate graphically the sequences necessary for completion of related portions of the Work.
 - 5. Coordinate the Construction Schedule with the order of the project, list of subcontracts, Submittal Schedule, progress reports, payment requests, and other schedules.
 - 6. Indicate completion in advance of the date established for Substantial Completion. Indicate Substantial Completion on the schedule to allow time for the Engineer's procedures necessary for certification of Substantial Completion.
- b. **Phasing:** On the schedule, show how requirements for phased completion to permit Work by separate Contractors and partial occupancy by the Authority affect the sequence of Work.

- c. **Work Stages:** Indicate important stages of construction for each major portion of the Work, including submittal review, testing, and installation.
- d. **Area Separations:** Provide a separate time bar to identify each major construction area for each major portion of the Work. Indicate where each element in an area must be sequenced or integrated with other activities.
- e. **Cost Correlation:** At the head of the schedule, provide a cost correlation line, indicating planned and actual costs. On the line, show dollar volume of Work performed as of the dates used for preparation of payment requests.
- f. **Distribution:** Following response to the initial submittal, print and distribute copies to the Engineer, Authority, subcontractors, and other parties required to comply with scheduled dates. Post copies in the Project meeting room and temporary field office.
 - 1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- g. **Schedule Updating:** Revise the schedule after each meeting, event or activity where revisions have been recognized or made. Issue the updated schedule concurrently with the report of each meeting.

Exhibit 1
Technical Specifications/Drawings

Project Manual

Environmental Package

for the

Former ATCOM Facility
5701 Lincoln Way
St. Louis, MO

Prepared for:



1015 Locust Street, Suite 1200
St. Louis, MO 63101

OCTOBER 2011

PE Project No. 9472.1

Prepared by:



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FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 0105 – SUMMARY OF WORK

PART 1 – GENERAL

1.1 SUMMARY OF WORK

- A. Work to be done:** The work consists of furnishing all labor, equipment, supplies and materials, employee training and testing, permits, agreements, registration and performance of all work in accordance with these specifications, drawings and applicable codes and regulations for the cleanup and/or removal, transportation and disposal of the asbestos-containing or contaminated materials (ACM) in conjunction with the Former ATCOM Facility located at 5701 Lincoln Way, St. Louis, Missouri. Whenever there is a conflict or overlap between these specifications, regulations or codes, the most stringent provisions are applicable.
- B. General Scope:** The successful Contractor's scope of work includes, but is not limited to, the following:
1. Bid and qualifications submittal
 2. Project plan and schedule preparation submittal and approval
 3. Pre-project documentation:
 - * Personnel medicals
 - * Asbestos training verification
 - * Respirator program verification
 - * Equipment/supply specification submittals/approval
 4. Insurance submittal and approval
 5. Facility baseline survey
 6. Regulatory notifications
 7. Removal area isolation
 8. Electrical and HVAC System isolation
 9. Decontamination system set-up
 10. ACM removal
 11. ACM disposal
 12. Area decontamination
 13. Project documentation
 14. Demobilization
 15. Project Closeout Documentation

C. General Requirements

It is the Owner's goal to remove all environmental issues from the Former ATCOM Facility; therefore the Contractor's base bid must be a comprehensive price that includes any and all eventualities to remove environmental issues. The quantities identified in the scope of work are estimates only - therefore it is mandatory that the bidder physically verifies all quantities to ensure that his base bid is comprehensive and accurate.

In addition to General Scope, the following specific site activities shall be followed during the abatement activities at the Former ATCOM Facility.

1. The Contractor shall prepare all necessary documentation required under applicable federal, state, and local laws, regulations, and requirements for the removal, transport and disposal of ACMs.
2. The owner shall provide the cost of the first set of clearance sampling relating to the asbestos clearance air testing. If the Contractor fails to meet the clearance criteria the first time – the Contractor shall be assessed all charges for the consultant's time and analytical expenses to conduct further asbestos clearance testing.
3. The Contractor shall have access to the work site during normal operating hours, 7:00 a.m. - 5:00 p.m., Monday through Friday.
4. The Contractor shall be responsible to provide all water and electricity to perform asbestos abatement, demolition, and related work in accordance with the requirements of this Specification and the Contract Documents.
5. A central staging area shall be selected and a personnel decontamination unit for showering during the demolition portion of the project shall be provided on-site.
6. The contractor shall be responsible for requesting that the owner deactivate any utilities and electrical systems in the work area(s) prior to the start of work.
7. OSHA compliance personnel air monitoring is required during all asbestos abatement work and is to be performed by the Contractor.
8. The Contractor shall be responsible for the security of all materials, equipment, etc. left at the site during the course of the project.
9. The site was formerly a firing range and previous sampling at the site revealed the following:
 - ~ Wipe samples collected within the firing tunnels identified elevated levels of metals (copper, iron, lead, magnesium, and zinc) on interior surfaces. Elevated lead concentrations ranged from 110,000 $\mu\text{g}/100\text{ cm}^2$ to 26,000,000 $\mu\text{g}/100\text{ cm}^2$.
 - ~ One surface soil sample collected near the foundation of the Proof House contained chlordane at a concentration of 1,730 mg/kg, in excess of the Missouri Soil Target Concentration (STARC) Scenario C limit of 30 mg/kg.
 - ~ One subsurface soil sample collected near the southeast corner of the site identified lead at 2,070 mg/kg, greater than the STARC Scenario C concentration of 660 mg/kg collected at a depth of 6 to 12 inches below ground surface
 - ~ One paint chip sample was collected from the eastern hallway within the Proof House indicated that the concentration of lead in the paint chip sample was 6,990 mg/kg.
 - ~ Explosives were not detected in wipe samples collected within the firing tunnels.
 - ~ Neither explosives nor VOCs were identified in the surface or subsurface soil samples collected.

All workers on the site shall be provided with OSHA Hazard Communication Training in compliance with 29 CFR 1910.1200 of the potential hazards associated with the site conditions.

D. Site Description & History

The Former ATCOM Facility contains approximately 3.5 acres of land which was utilized for small arms munitions (.30 and .50 caliber) testing during World War II. The site consists of a heavily wooded parcel containing a two-story building with a partial basement; a small concrete ammunition storage building; five underground firing range tunnels; and 12 aboveground test firing stations. The main building (Proof House) consists of a Wood Frame and Concrete Portion of the building and are in poor condition. Confirmed ACMs have been identified within the building generally consisting of transite siding, thermal system insulation, window glazing, floor tile/mastic, boiler insulation and sprayed-on insulation.

The firing tunnels and test firing stations are primarily intact and contain sprayed-on asbestos insulation consisting of approximately 25,000 square feet in tunnels and 9,000 square feet in the test firing stations. The two northern-most firing tunnels (Tunnels # 4 and # 5) are the longest of the five firing tunnels, each originally consisting of approximately 600 feet in length. However, a cell tower was constructed on the northwest corner of the site in the early 1990s, and it is confirmed that portions of the firing tunnels were collapsed/removed and filled-in during construction of the cell tower. The tunnels were collapsed approximately at the location of the property/fence line and the tunnels are now approximately 500 feet in length. Tunnel # 4 can be accessed from the Proof House and Tunnel # 5 can be accessed from the Proof House and from a stairwell access, located approximately 300 feet to the west of the Proof House.

Two shorter tunnels (Tunnels # 2 and # 3) are located immediately to the south of the Tunnel # 4 and # 5 firing tunnels. These firing tunnels measure approximately 140 feet in length and extend from the Proof House to a bullet trap. These firing tunnels can be accessed at the Proof House and from a stairwell access point near the bullet traps.

The southern-most firing tunnel (Tunnel # 1) is approximately 168 feet in length and extends from the Proof House to a bullet trap. This firing tunnel can be accessed at the Proof House and from a stairwell access point near the bullet trap.

E. Asbestos Containing Materials Summary & Procedures

SCS Engineers located at 10975 El Monte, Suite 100, Overland Park, KS 66211, conducted an asbestos inspection in compliance with applicable regulations dated January 2011. Please refer to Appendix 5: Asbestos Inspection.

The Contractor shall supply all labor, materials, services, and equipment required to perform the asbestos abatement activities as described. The project has been divided into four separate phases with each to be conducted independently of the other. The four separate phases and specific details of each phase are to be conducted in the listed order as follows:

Phase 1 – Clearing and Grubbing

The Contractor shall clear the site as specified in Section 0166 - Clearing and Grubbing of these Specifications and as indicated on project drawings. The Contractor is responsible for all site security and shall insure the site is secured to the satisfaction of

the owner after completion of this Phase and that OSHA-compliant asbestos warning signs are posted at all site entry points to the site.

Phase 2 – Wood Portion of Proof House

The Contractor shall demolish, remove and legally dispose of the wooden portion of the Proof House utilizing Wet Demolition Methods as specified in Section 0164 – Wet Demolition Abatement Activities of these Specifications. This portion of the Proof House contains ACMs and is in danger of collapse. The entire structure (with exception of the basement boiler room) shall be treated as ACM and kept wet during demolition, with all waste generated to be packaged and disposed of as ACM as specified in Section 2030 of these Specifications. The Basement Boiler Room shall not be included in Phase 2. The Contractor shall leave the Basement Boiler Room intact and asbestos abatement shall be performed during Phase 3 Activities. All work for this Phase shall be performed by asbestos abatement workers certified in accordance with 10 CSR 10-6.250 and Chapter 643 of the Missouri Revised Statutes (RSMo).

Wood Portion of Proof House:

Material Type	Estimated Quantity	Work Procedure
Tan Interior Window Glazing	2,200 LF	Section 0164 - Wet Demolition
Plaster	11,000 SF	Section 0164 - Wet Demolition
Pipe Insulation	1,200 LF	Section 0164 - Wet Demolition
White Wallboard Compound	800 SF	Section 0164 - Wet Demolition
Black & Green 9" x 9" Floor Tile & Mastic	4,725 SF	Section 0164 - Wet Demolition
White HVAC Insulation	50 SF	Section 0164 - Wet Demolition
Exterior Transite	6,500 SF	Section 0164 - Wet Demolition
Roofing Sealant	500 LF	Section 0164 - Wet Demolition
Floor Debris	2,580 SF	Section 0164 - Wet Demolition
Roofing Sealant	500 LF	Section 0164 - Wet Demolition

Upon completion of demolition, the Contractor shall insure all access and entry points to the remaining concrete structure are sealed with masonry walls constructed of standard masonry blocks and mortar to the satisfaction of the owner.

Phase 3 – Asbestos Removal in Concrete Portions of Proof House

The Contractor shall remove and legally dispose of all asbestos-containing materials including, but not limited to: pipe insulation, plaster, floor debris, sprayed on insulation, floor tile/mastic, fire doors, and window glazing utilizing the work practice as specified below of these Specifications. Demolition of walls will be required to access pipe

insulation and shall be performed within the full containment. All asbestos-containing materials and asbestos-contaminated waste generated shall be packaged and disposed of as specified in Section 2030 of these Specifications. All work for this Phase shall be performed by asbestos abatement workers certified in accordance with 10 CSR 10-6.250 and Chapter 643 of the Missouri Revised Statutes (RSMo).

Concrete Portion of Proof House:

Material Type	Estimated Quantity	Work Procedure
Tan Interior Window Glazing	300 LF	Section 0165 - Window Caulk
Plaster	2,500 SF	Section 0156 - Full Containment
Pipe Insulation	1,600 LF	Section 0156 - Full Containment
Red 12" x 12" Floor Tile & Mastic	2,325 SF	Section 0156 - Full Containment
Spray on Insulation (Test Firing Station Rooms)	9,000 SF	Section 0156 - Full Containment
Floor Debris	7,500 SF	Section 0156 - Full Containment
Fire Doors	10	Section 0162 - Fire Doors
Basement Boiler Room		
Boiler Insulation	200 SF	Section 0156 - Full Containment
Heat Exchange Insulation	150 SF	Section 0156 - Full Containment
Pipe Insulation	150 LF	Section 0156 - Full Containment
Multicolored Pipe Insulation	150 LF	Section 0156 - Full Containment
Floor Debris	1,920 SF	Section 0156 - Full Containment

Upon completion of the abatement, the Contractor shall insure all access and entry points to the underground firing tunnels and any other area containing ACM to remain in-place are sealed with masonry walls constructed of standard masonry blocks and mortar or other approved material to the satisfaction of the owner, after completion of this Phase, and that OSHA-compliant asbestos warning signs are posted at all site access and tunnel entry points.

Phase 4 – Asbestos Removal in Underground Firing Tunnels

The Contractor shall secure tunnels and access to tunnels in the areas noted on Attachment 4 and post durable asbestos warning signs in compliance with OSHA regulations. The Contractor shall remove and legally dispose of all asbestos-containing materials including, but not limited to: sprayed-on sound proofing/insulation utilizing a full containment with a negative pressure system in accordance with Section 0156 of these Specifications. All asbestos-containing materials and asbestos-contaminated

waste generated shall be packaged and disposed of as specified in Section 2030 of these Specifications. All work for this Phase shall be performed by asbestos abatement workers certified in accordance with 10 CSR 10-6.250 and Chapter 643 of the Missouri Revised Statutes (RSMo).

Firing Range Tunnels:

Material Type	Estimated Quantity	Work Procedure
Tunnel # 1 (Southernmost)	3,800 SF	Section 0156 - Full Containment
Tunnel # 2	3,100 SF	Section 0156 - Full Containment
Tunnel # 3	3,100 SF	Section 0156 - Full Containment
Tunnel # 4	7,500 SF	Section 0156 - Full Containment
Tunnel # 5 (Northernmost)	7,500 SF	Section 0156 - Full Containment

The Contractor shall insure all access and entry points to the underground firing tunnels, any other accessible areas to the tunnels, and the portions of Tunnels #4 and #5 at the property line to the Cell Tower site are sealed with masonry walls constructed of standard masonry blocks and mortar to the satisfaction of the owner, after completion of this Phase.

1.2. CONDUCT OF WORK

A. Premises

The Contractors work will be confined to the property addresses where work is being conducted. The Contractor will be responsible to take all precautions necessary to limit access to work areas and to protect building's occupants, and any adjacent properties during the removal period.

B. Use of the Site

Contractor shall confine operations at the site to the areas permitted under the Contract and indicated in the scope of work and specification. The Contractor will conform to site rules and regulations affecting the work while engaged in project construction including the following:

1. Do not unreasonably encumber the site with materials or equipment. The building will be restricted to those individuals performing environmental and renovation work. The environmental contractor will have to coordinate with the general contractor for storage locations in the building. Keep the site free from accumulation of waste, rubbish or construction debris.
2. Smoking or open fires will not be permitted within the building enclosure or on the premises.
3. Contractor shall protect all property within the work site. All and any damage is to be repaired at the Contractor's expense.

4. The Contractor shall seal all openings through the walls where they are penetrated by ducts, pipes, conduits, or any other openings where the work being performed could cause adjacent areas or other areas of the building to be contaminated. The Contractor shall be liable for all costs incurred to correct and remove any contamination of other areas due to negligence for any reason. The owner shall assume no additional costs or obligations for requirements contained in this paragraph. Work practices utilized to contain asbestos during the abatement shall conform, where applicable, to the precautions and procedures are described within these Specifications. All other work practices and procedures included in this specification shall apply unless waived in writing by the owner or owner representative.

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0110 – PROJECT COORDINATION

PART 1 – GENERAL

1.1 GENERAL REQUIREMENTS

A. Coordination

Coordination with the owner shall be made through the Consultant to assure compliance from the Contractor in completing the work with a minimum of interference and inconvenience. The Contractor shall submit regulatory notification information to the Consultant for review. The Contractor shall submit schedules and plans to the Consultant to do the work and shall notify him at least 2 days in advance of changes and/or revisions in the schedule. The Contractor shall provide all labor and materials required to keep pace with the specified schedule requirements.

B. Access

Contractor shall have access to the work site during normal operating hours, 7:00 a.m. - 5:00 p.m., Monday through Friday. Work hours other than as specified above shall be coordinated with building owner, general contractor and Consultant.

C. Summary

This section specifies administrative and supervisory requirements needed for project coordination:

1. Progress Meetings
2. Pre-Construction Meeting
3. Contractor Daily Log

1.2 PROGRESS MEETINGS

- A.** The Contractor shall attend regularly scheduled meetings with the Consultant. These meetings shall include: review of overall project status and work schedules; memorandum on required coordination, activities, notices and reports; reporting unusual events and accidents; submissions of technical data on materials, products, personnel, governing regulations, and safety equipment required by the Contract Documents; inspection and testing requirements; purchases and deliveries; space and access limitations; manufacturer's recommendations; compatibility of materials; acceptability of substitutes; possible conflicts and compatibility problems; and performance requirements. The Contractor shall also keep the Owner's authorized representative advised of all abatement activities during the project. The Owner or his authorized representative shall have the right to restrict the Contractor's work to comply with their proper operation and function of the overall project.

1.3 PRE-CONSTRUCTION MEETING

A. Attendance

The Contractor and supervisory personnel, who provide on-site direction of the abatement activities, must attend a pre-start job meeting. The Consultant will be present at this meeting.

B. Information provided by the Contractor

Three (3) working days prior to this meeting, the Contractor shall provide all submittals as required by this specification for the asbestos abatement. In addition, the Contractor shall be prepared to provide detailed information concerning:

1. Preparation of the Work Area
2. Personal protection equipment including respiratory protection and protective clothing
3. Employees, including the Project Manager, who will participate in the project, including delineation of experience, training and assigned responsibilities during the project
4. Decontamination procedures for the abatement personnel, Work Area and equipment
5. Abatement methods and procedures to be used
6. Required OSHA air monitoring procedures and sampling protocols
7. Procedures for handling and transporting waste materials
8. Procedures for final decontamination and cleanup
9. A sequence of work and performance schedule

1.4 CONTRACTOR DAILY LOG

Contractor shall maintain a daily log documenting the following items:

1. Meetings; purpose, attendees, brief discussion
2. Site visitations
3. Sign-in sheet (workers, visitors)
4. OSHA air monitoring tests and results
5. Regulatory inspections
6. Daily work schedule & activity summary
7. Containment sign-in sheets

A copy of the Contractor sign-in sheet, daily log of activities and OSHA air monitoring results will be given weekly to the Consultant.

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0120 – DEFINITIONS AND STANDARDS

PART 1 – GENERAL

1.1 DEFINITIONS

- A. **General Explanation:** A substantial amount of specification language constitutes definitions for terms found in other contract documents, including the drawings. (Drawings must be recognized as diagrammatic in nature and not completely descriptive of the requirements indicated thereon.) Certain terms used in contract documents are defined in this article. Definitions and explanations of this section are not necessarily either complete or exclusive, but are general for the work to the extent they are not stated more explicitly in another element of contract documents. Other definitions are included in sections where applicable.
- B. **General Requirements:** The provisions or requirements of Division 1 and 2 sections apply to entire work of Asbestos Abatement and, where so indicated, to other elements which are included in the project.
- C. **Indicated:** The term "Indicated" is a cross-reference to graphic representations, notes or schedules on drawings, to other paragraphs or schedules in the specifications, and to similar means of recording requirements in contract documents. Where terms such as "shown," "noted," "scheduled," and "specified" are used in lieu of "indicated," it is for the purpose of helping readers locate a cross-reference, and no limitation of location is intended except as specifically noted.
- D. **Directed, Requested, etc.:** Where not otherwise explained, terms such as "directed," "requested," "authorized," "selected," "approved," "required," "accepted," and "permitted" mean "directed by Consultant" and similar phrases. However, no such implied meaning will be interpreted to extend the Consultant's responsibility into Contractor's responsibility for construction supervision.
- E. **Approve:** Where used in conjunction with the Consultant's response to submittals, requests, applications, inquiries, reports and claims by Contractor, the meaning of the term "approved" will be held to limitations of Consultant's responsibilities and duties as specified in General, Special and Supplementary Conditions. In no case will "approval" by Contracting Officer be interpreted as a release of Contractor from responsibilities to fulfill requirements of contract documents.
- F. **Project Site:** The term "project site" is defined as the space available to Contractor for performance of the work, either exclusively or in conjunction with others performing other work as part of the project.
- G. **Furnish:** Except as otherwise defined in greater detail, term "furnish" is used to mean supply and deliver to project site, ready for unloading, unpacking, assembly, installation, etc., as applicable in each instance.
- H. **Install:** Except as otherwise defined in greater detail, term "install" is used to describe operations at the project site including unloading, unpacking, assembly, erection,

placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations, as applicable in each instance.

- I. **Provide:** Except as otherwise defined in greater detail, term "provide" means furnish and install, complete and ready for intended use, as applicable in each instance.
- J. **Installer:** The term "installer" is defined as the entity (person or firm) engaged by the Contractor, or its subcontractor or sub-subcontractor for performance of a particular unit of work at the project site, including installation, erection, application and similar required operations. It is a general requirement that such entities (Installers) be expert in operations they are engaged to perform.
- K. **Testing Laboratory:** The term "testing laboratory" is defined as an independent entity of the Contractor engaged to perform specific inspections or tests of the work, either at the project site or elsewhere; and to report and (if required) interpret results of those inspections or tests. The testing laboratory shall be a current, proficient, participant in the NIOSH PAT program, or be accredited by the required organizations (American Industrial Hygiene Association and the National Voluntary Laboratory Accreditation Program (NVLAP)).
- L. **Consultant:** The Consultant is the entity representing the owner for this project with the authority to stop the work upon verbal order if requirements of the contract documents are not met, or if the interests of the owner, safety of any person or the owner's property are jeopardized by the work. All references to Architect or Engineer in the contract documents shall in all cases refer to the Consultant. The Consultant will represent the owner during construction and until final payment is due. The Consultant will advise and consult with the owner. The owner's instructions to the Contractor shall be forwarded through the Consultant.
- M. **Project Manager:** The Project Manager is the Contractor's representative at the work site. This person will generally be the Competent person required by OSHA in 29 CFR 1926.

1.2 DEFINITIONS RELATIVE TO ASBESTOS ABATEMENT

- A. **Aerosol:** A system consisting of particles, solid or liquid, suspended in air.
- B. **Air Cell:** Insulation normally used on pipes and duct work that is comprised of corrugated cardboard which is frequently comprised of asbestos combined with cellulose or refractory binders.
- C. **Air Filtration Device (AFD):** A local exhaust system, utilizing HEPA filtration capable of maintaining a negative pressure inside the work area and a constant air flow from adjacent areas into the work area and exhausting that air through HEPA filters outside the work area.
- D. **Air Monitoring:** Measuring the fiber content of a specific volume of air.
- E. **Amended Water:** Water to which a surfactant has been added to increase the surface tension too less than or equal to 35 dynes.
- F. **Asbestos:** The asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite. For purposes of

determining respiratory and worker protection, both the asbestiform and non-asbestiform varieties of the above minerals and any of these materials that have been chemically treated and/or altered shall be considered as asbestos. Chrysotile and amosite asbestos is present in the boiler insulation; chrysotile asbestos is in the pipe joint insulations, floor tile, mastics, etc.

- G. Asbestos-Containing Material (ACM):** Any material containing more than 1% by weight of asbestos of any type or mixture of types.
- H. Asbestos-Contaminated Material:** Any material, which is or is suspected of being or any material contaminated with an asbestos-containing material which is to be removed from a work area for disposal.
- I. Authorized Visitor:** The Consultant, testing lab personnel, the Architect/Engineer or a representative of any Federal, state and local regulatory or other agency having authority over the project.
- J. Breathing Zone:** A hemisphere forward of the shoulders with a radius of approximately 9 to 12 inches.
- K. Ceiling Concentration:** The concentration of an airborne substance that shall not be exceeded.
- L. Certified Industrial Hygienist (CIH):** An industrial hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene.
- M. Clean Zone:** Areas outside of project scope that contains background levels of airborne particulate.
- N. Clearance Monitoring/Air Sampling:** Air Sampling conducted to verify that the clearance criteria have been achieved in compliance with applicable regulation and/or this specification.
- O. Compliance Air Sampling:** Air sampling conducted during the progress of work to verify airborne asbestos limits are not exceeded and that adequate respiratory protection measures are being used. Analysis by Phase Contrast Microscopy (PCM).
- P. Disposal Facility:** An off-site facility that receives for processing, to include recycling, reuse, recovery, incineration, treatment, land application, fuels recovery, dechlorination, stabilization, landfill, and/or disposal.
- Q. Full-Containment Work Area:** A Work Area which has been sealed, plasticized, and equipped with a Personnel Decontamination System, an Equipment Decontamination System and a Negative Pressure System.
- R. Critical Barrier:** Isolation barrier that isolates the work area from clean areas.
- S. Curtained Doorway:** A device to allow ingress or egress from one room to another while permitting one-way air movement between the rooms, typically constructed by placing three layered sheets of plastic over an existing or temporarily framed doorway. One sheet shall be secured at the top and left side, the second sheet at the top and right side, and the

third sheet at the top. All sheets hang straight and maintain a seal over the doorway when not in use. Other effective designs are permissible.

- T. Curtained Doorway - One Way Type:** A device to allow ingress or egress from one room to another while permitting one-way air movement between the rooms, typically constructed by placing a sheet of plastic over an existing or temporarily framed doorway, securing at along the top, side and bottom of the doorway. A slit is provided in the plastic sheet and the edges are reinforced with duct tape. A second layer of plastic is placed on the dirty side of each doorway and secured at the top with weights applied to the bottom. Make-up air will flow through the doorway to the work area.
- U. Decontamination Zones:** Contained areas consisting of the vacuum zone and the shower/wet-cleaning zone arranged per Section 0185.
- V. Demolition:** The wrecking or taking out of any building component, system, finish or assembly of a facility together with any related handling operations.
- W. Disposal Bag:** 6-mil thick leak-tight plastic bags used for transporting asbestos waste from work site to the disposal site. Each is labeled per regulations as follows:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

and

RQ
HAZARDOUS SUBSTANCE
SOLID ASBESTOS
N.O.S.

- X. Dust Controlled Work Area:** A limited access work area typically used in large-scale glovebagging. This area is sealed, but not necessarily fully plasticized. This area is not equipped with a personnel decontamination system.
- Y. Encapsulant:** A material that surrounds or embeds asbestos fibers in an adhesive matrix, to prevent release of fibers.

Bridging encapsulant: an encapsulant that forms a flexible membrane on the surface of an in situ asbestos matrix.

Penetrating encapsulant: an encapsulant that saturates the in situ asbestos matrix to the substrate.

Removal encapsulant: a penetrating encapsulant specifically designed for removal of asbestos-containing materials.

- Z. Encapsulation:** Treatment of asbestos-containing materials, with an encapsulant to form an elastomeric, impact resistant membrane between the material and ambient air.

- AA. Enclosure:** The construction of an airtight, impermeable, permanent barrier around asbestos-containing material to control the release of asbestos fibers into the air.
- BB. Filter:** A media component used to remove solid or liquid particles from varied media.
- CC. Friable Asbestos Material:** Material that contains more than 1.0% asbestos by weight and that can be crumbled, pulverized, or reduced to powder by hand pressure.
- DD. Glovebag Technique:** A method for removing friable Asbestos Containing Material from HVAC ducts, short piping runs, valves, joints, elbows and other non-planar surfaces within a self-contained bag enclosure. The glovebag assembly is a manufactured or fabricated device consisting of a glovebag (typically constructed of 6-mil transparent polyethylene or polyvinylchloride plastic), two inward projecting long sleeves, an internal tool pouch, and an attached, labeled receptacle for asbestos waste. The glovebag is constructed and installed in such a manner that it surrounds the object or material to be removed and contains all asbestos fibers released during the process. All workers who are permitted to use the Glovebag Technique must be highly trained, experienced and skilled in this method.
- EE. HEPA Filter:** A High Efficiency Particulate Absolute (HEPA) filter capable of trapping and retaining 99.97% of fibers greater than 0.3 microns in length.
- FF. HEPA Filter Vacuum Collection Equipment (or vacuum cleaner):** High efficiency particulate air (absolute) filtered vacuum collection equipment with a filter system capable of collecting and retaining asbestos fibers. Filters should be of 99.97% efficiency for retaining fibers of 0.3 microns or larger.
- GG. Limited-Containment Work Area:** An isolated or controlled access Work Area is typically used with large-scale glovebagging and in the preparation of containment in contaminated areas. This area is sealed, but not necessarily fully plasticized. The area is not necessarily equipped with a Personnel Decontamination System connected directly to the Work Area but it is recommended. An Equipment Decontamination System is recommended but not mandatory. This area utilizes a negative pressure ventilation system.
- HH. Negative Pressure Respirator:** A respirator in which the air pressure inside the respiratory-inlet covering is positive during exhalation in relation to the air pressure of the outside atmosphere and negative during inhalation in relation to the air pressure of the outside atmosphere.
- II. Negative Pressure Ventilation System:** A local exhaust system, utilizing HEPA filtration capable of maintaining a negative pressure inside the work area and a constant air flow from adjacent areas into the work area and exhausting that air through HEPA filters outside the work area.
- JJ. Negative Pressure:** Air pressure lower than surrounding areas, generally caused by exhausting air from a sealed space (work area).
- KK. Personal Monitoring:** Sampling of the asbestos fiber concentrations within the breathing zone of an employee.
- LL. Plasticize:** To cover floors, ceilings, and walls with plastic sheeting as herein specified.

- MM. Protection Factor:** The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.
- NN. Respirator:** A device designed to protect the wearer from the inhalation of harmful atmospheres. Shall be in accordance with OSHA Regulation 1910.1001(d), k OSHA regulation 1910.134 and ANSI Z88.2-1992. Respirators shall also be approved by NIOSH under the provisions of 30 CFR Part II.
- OO. Time Weighted Average (TWA):** The average concentration of a contaminant in air during a specific time period.
- PP. Trace Fiber Fixation:** Encapsulation procedure conducted on all surfaces from which asbestos has been removed to permanently seal any remaining ACM.
- QQ. Visible Emissions:** Any emissions containing particulate material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.
- RR. Wet Cleaning:** The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning utensils which have been dampened with amended water or diluted removal encapsulant and afterwards thoroughly decontaminated or disposed of as asbestos contaminated waste.
- SS. Work Area:** The area where asbestos related work or removal operations are performed which is defined and/or isolated to prevent the spread of asbestos dust, fibers or debris, and entry by unauthorized personnel. Work area is a Regulated Area as defined by 29 CFR 1926 as designated on drawings.
- TT. Visible Debris:** Any particulate asbestos material or residue that is visually detectable on a surface without the aid of instruments.

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0125 – CODES AND REGULATIONS

PART 1 – GENERAL

1.1 DESCRIPTION

This section sets forth governmental regulations and industry standards, which are included and incorporated herein by reference and made a part of the specification. The Contractor is responsible for acquiring applicable permits for completion of work and shall send copies of all permits to the Consultant. The Contractor shall also meet all requirements of Federal, State and local regulations.

A. General Applicability of Codes, Regulations, and Standards

Except to the extent that more explicit or more stringent requirements are written directly into the contract documents, all applicable codes, regulations, and standards have the same force and effect (and are made a part of the contract documents by reference) as if copied directly into the contract documents, or as if published copies are bound herewith.

B. Contractor Responsibility

The Contractor shall assume full responsibility and liability for the compliance with all applicable Federal, state and local regulations pertaining to work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site. The Contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable Federal, state, and local regulations. The Contractor shall hold the owner and Consultant harmless for failure to comply with any applicable work, hauling, disposal, safety, health or other regulation on the part of himself, his employees, or his subcontractors.

C. Federal Requirements

Federal requirements which govern asbestos abatement work or hauling and disposal of asbestos waste materials include, but are not limited to, the following:

1. U.S. Department of Labor, Occupational Safety and Health Administration (OSHA), including but not limited to:

Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Final Rules Title 29, Part 1910, Section 1001 and Part 1926, Section 1101 of the Code of Federal Regulations

Respiratory Protection
Title 29, Part 1910, Section 134 of the Code of Federal Regulations

Construction Industry
Title 29, Part 1926, of the Code of Federal Regulations

Hazard Communication
Title 29, Part 1910, Section 1200 of the Code of Federal Regulations

Specifications for Accident Prevention Signs and Tags
Title 29, Part 1910, Section 145 of the Code of Federal Regulations

2. U.S. Environmental Protection Agency

Asbestos Abatement Project Rule
40 CFR Part 762, Subpart G of the Code of Federal Regulations

Regulation for Asbestos
Title 40, Part 61, Subpart A of the Code of Federal Regulations

National Emission Standard for Asbestos (NESHAPS)
Title 40, Part 61, Subpart M (Revised Subpart B)
of the Code of Federal Regulations

Resource Conservation and Recovery Act
Title 40, Part 261 of the Code of Federal Regulations

3. U.S. Department of Transportation (DOT), including but not limited to:

Hazardous Substance Title 29, Part 171 and 172 of the Code of Federal Regulations

4. **State Requirements, which govern asbestos, lead abatement, underground storage tank registration/removal and hazardous waste transportation and disposal** work including but are not limited to the following: The Missouri Department of Natural Resources and the Missouri Department of Health.
5. **Local Requirements** - Abide by all local requirements that govern asbestos, lead abatement and underground storage tank removal work or hauling and disposal including City of St. Louis Air Pollution Control Program.

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0130 – SUBMITTALS AND NOTIFICATIONS

PART 1 – GENERAL

1.1 QUALIFICATIONS

The owner requires qualified Contractors and subcontractors to perform all work under this contract. The owner reserves the right to make final approval of Contractor's qualifications for performing this work. To be considered "qualified" for performance of asbestos, lead abatement projects, the Contractor and his subcontractors must fulfill the following:

A. Be registered per Section 0125.

B. Worker Training

In accordance with 29 CFR 1926 and the Missouri Department of Natural Resources (MDNR) and the Missouri Department of Health (MDOH), all workers must be trained in an approved class in the dangers inherent in handling asbestos, lead, proper work procedures, and personal and area protective measures. MDNR and/or MDOH certificates for each worker, supervisor, or management person involved in the abatement project must be submitted to the Consultant. The topics covered in the course must include the following (at a minimum):

- Methods of recognizing asbestos and lead based paints
- Health effects associated with asbestos and lead based paints
- Relationship between smoking and asbestos in producing lung cancer
- Nature of operations that could result in exposure to asbestos and lead
- Importance of and instruction in the use of necessary protective controls, practices and procedures to minimize exposure including:
 - Engineering Controls
 - Work Practices
 - Respirators
 - Housekeeping Procedures
 - Hygiene Facilities
 - Protective Clothing
 - Decontamination Procedures
 - Emergency Procedures
 - Waste Disposal Procedures
 - Purpose, proper use, fitting, instructions, and limitations of respirators as required by 29 CFR 1910.134
 - Appropriate work practices for the work to be conducted
 - Requirements of medical surveillance program
 - Review of 29 CFR 1926
 - Negative air systems
 - Work practices including hands-on or on-job training
 - Personal decontamination procedures
 - Air monitoring, personal and area

C. Superintendent Qualifications

The asbestos and lead abatement site superintendent shall be in primary charge of the project and shall be available at all times during the abatement project. The superintendent shall also be on site at all times unless a competent supervisor is present on site, as determined by the environmental consultant, in consultation with the general partner's consultant. The superintendent shall have a minimum of five years of experience in asbestos and lead abatement, with at least three years experience as site superintendent. Asbestos and lead abatement site superintendents shall be licensed, accredited, and/or trained in accordance with applicable federal, State, local, and other requirements.

D. Medical Examinations

Provide medical examinations for all on-site workers. Examination shall, as a minimum, meet OSHA requirements as set forth in 29 CFR 1926. In addition, provide an evaluation of the individual's ability to work in environments capable of producing heat stress in the worker.

1.2 SUBMITTALS WITH BIDS

The Contractor must document and submit the following information with his bid:

A. Statement of Qualifications

1. Recent project references consisting of names and phone numbers of at least three clients and three third-party oversight professionals. The client references should include building owners or property managers for abatement projects of similar or greater size and complexity.
2. Company history/profile.
3. Resume, qualifications, certifications, training and licenses of proposed project site superintendent(s) proposed for the project. (Do not send information for workers in the qualifications package).
4. List and explanation of all OSHA/EPA/State environmental regulatory violations of any type in the past 5 years, including contact person and telephone number of the regulatory agency. If no violations occurred, a written certification must be made to this effect and included in the qualification package.
5. Documentation from the worker compensation carrier of the company's experience modification rating for the last three years (2008, 2009 and 2010).
6. A listing of all legal judgments and settlements in which the Contractor was found guilty or liable, or they or their insurance carriers made any settlement or other payments associated with the claim.
7. Evidence that the contractor maintains or holds all applicable licenses.
8. Evidence that the Contractor is capable of obtaining sufficient insurance and bonding for the project.

1.3 POST AWARD SUBMITTALS

The Contractor shall submit upon notification of award of this contract the following information within 10 days:

- A. **Project Schedule:** The Contractor shall submit his plan to be used to conform to this specification and contract.
- B. **Certificate of Worker Acknowledgment:** Submit a signed copy of the Certificate of Worker's Acknowledgment found at the end of this section, for each worker who is to be at the job site or entering the work area (see Attachment 1).
- C. **Training Program:** Submit a list of employees and the MDNR worker/supervisor training certificates for each on-site individual.
- D. **Report from Medical Examination:** Conducted within last 12 months as part of compliance with OSHA medical surveillance requirements for each worker who is to enter the work area. Submit, at a minimum, for each worker the following:
 - 1. Name and Social Security Number.
 - 2. Physicians Written Opinion from examining physician including at a minimum the following:
 - * Any recommended limitations on the worker or on the use of personal protective equipment such as respirators;
 - * Whether worker has any detected medical conditions that would place the worker at an increased risk of material health impairment from exposure to asbestos.
 - * Statement that the worker has been informed by the physician of the results of the medical examination and of any medical conditions that may result from asbestos exposure.
 - * Copy of information that was provided to physician in compliance with 29 CFR 1926.
 - * Statement that worker is able to wear and use the type of respiratory protection proposed for the project, and is able to work safely in an environment capable of producing heat stress in the worker.
- E. **Product Data:** MSDS sheets shall be provided for the following materials: aerosol spray adhesives, mastic removers, amended water solutions, and encapsulants.
- F. **Respiratory Protection Program:** Submit level of respiratory protection intended for each operation required by the project.
- G. **Training Program:** Submit a list of employees and the MDNR and MDOH worker/supervisor training certificates for each on-site individual.
- H. **Health and Safety Plan:** The Contractor shall submit his health and safety plan, including personnel protection guidelines, emergency procedures, and contingency plan.
- I. **Utilities:** Utility needs, necessary connections and locations for equipment to be used.
- J. **Subcontractors:** The successful Contractor must submit name and qualifications and certification for any subcontractors and analytical laboratory to be utilized.

- K. Insurance:** The Contractor involved in abatement activities will be required to demonstrate adequate insurance coverage for the activities they perform. Contractors should be prepared to demonstrate coverage or obtain coverage for all risks associated with the abatement activities, including but not limited to worker's compensation, general liability, pollution liability, specific toxic substance liability, and other insurance, as applicable to the general partner's consultant or Contractor role and responsibilities. Acceptable confirmation of the Contractor(s) insurance coverage (e.g., insurance certificate) should be provided to the consultant prior to contract execution. The Contractor shall be prepared to provide complete copies of their insurance policies upon request. In all cases, the approved abatement Contractor shall provide insurance certificates naming the partnership and any other applicable entity as additional insured prior to beginning work on the project.
- L. Licenses, Permits and Registrations:** Copies of all State and local licenses and registrations necessary to carry out the work of this contract.
- M. Waste Disposal:** Copy of state or local license for waste hauler. Name, address, and identification number of disposal sites for all asbestos wastes.

ATTACHMENT 1

ASBESTOS REMOVAL

CERTIFICATE OF WORKER'S ACKNOWLEDGEMENT

PROJECT NAME	DATE
PROJECT ADDRESS	
CONTRACTOR'S NAME	

WORKING WITH ASBESTOS CAN BE DANGEROUS. INHALING ASBESTOS FIBERS HAS BEEN LINKED WITH VARIOUS TYPES OF CANCER. IF YOU SMOKE AND INHALE ASBESTOS FIBERS THE CHANCE THAT YOU WILL DEVELOP LUNG CANCER IS GREATER THAN THAT OF THE NON-SMOKING PUBLIC.

Your employer's contract with the Owner for the above project requires that: 1) You be supplied with the proper respirator and be trained in its use, 2) You be trained in safe work practices and in the use of the equipment found on the job, and 3) You receive a medical examination.

RESPIRATORY PROTECTION: You must have been trained in the proper use of respirators, and informed of the type respirator to be used on this project. You must be given a copy of the written respiratory protection manual issued by your employer. You must be equipped with the respirator to be used on the above project at no cost to you.

TRAINING COURSE: You must have been trained in the dangers inherent in handling asbestos and breathing asbestos dust and in proper work procedures and personal and area protective measures. The topics covered in the course must have included the following:

Physical characteristics of asbestos	Health hazards associated with asbestos
Respiratory protection	Use of protective equipment
Pressure Differential Systems	Work practices including hands-on or on-the-job training
Personal decontamination procedures	Air monitoring, personal and area

MEDICAL EXAMINATION: You must have had a medical examination within the past 12 months at no cost to you. This examination must have included: medical history, pulmonary function tests and may have included an evaluation of a chest x-ray.

By signing this document you are acknowledging only that the Owner of the building you are about to work in has advised you of your rights to training and protection relative to your employer, the Contractor.

Signature

Social Security No

Printed Name

Witness

1.4 NOTICES

A. Requirements

1. The Contractor will prepare and submit all information required for notification prior to project start-up. No site work or demolition shall take place until approval is given.
2. The Consultant must first approve any waivers requested by the Contractor from the regulatory requirements.

B. Prior to disposal of the asbestos waste:

1. Contractor shall provide the name and address of the disposal sites for the all special/hazardous/asbestos wastes.
2. The Contractor shall provide a copy of all waste profiles.
3. Contractor shall indicate means of transportation to the waste site special/hazardous/asbestos waste facilities.
4. The owner shall provide laboratory results of asbestos sample analysis if needed by Contractor.
5. The contractor shall receive a completed Landfill Acceptance Letter (see Appendix III) from all receiving facilities, and provide the completed letters to the consultant prior to transporting any asbestos materials from the site.

1.5 PERMITS

Construction permits specifically for asbestos, lead based paints and underground storage tank removal.

1.6 LICENSES

Maintain current licenses as required by the MDNR and MDOH for the removal, transporting, disposal or other regulated activity relative to the work of this contract.

1.7 POSTING AND FILING OF REGULATIONS

Maintain a copy of applicable Federal, State and local regulations on the project site.

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0135 – TESTING LABORATORY SERVICES

PART 1 – GENERAL

1.1 DESCRIPTION

A. Air Monitoring

This section describes air monitoring to be carried out by the Consultant to verify that the building beyond the work area, outside environment and within the work area remain below specified limits. This section also sets forth airborne fiber levels both inside and outside the work area as action levels, and describes the action required by the Contractor if an action level is met or exceeded.

1. Should any of the action limits be exceeded, the Contractor shall immediately cease asbestos abatement activities until the fault is corrected. Work shall not recommence until authorized by the Consultant. Air monitoring required by OSHA is the responsibility of the Contractor.
2. The Consultant will monitor airborne fiber counts in the work area decontamination zones and clean area. The purpose of this air monitoring will be to detect airborne fiber counts which may significantly challenge the integrity of the work area isolation procedures to protect the balance of the building or outside of the building from contamination by airborne fibers.
3. To determine if the elevated airborne fiber counts encountered during abatement operations have been maintained at an acceptable level and before the space is released and initial barriers removed, the Consultant will sample and analyze air per Section 0195.
4. The Consultant may conduct additional compliance/certification air monitoring throughout the course of the project to verify the validity of Contractor's sample results.

B. Airborne Fiber Count Ceilings: (Analysis by PCM - NIOSH 7400)

Inside Work Area: Maintain an average airborne count in the work area in accordance with respiratory protection used. If the fiber counts rise above this figure for any sample taken, revise work procedures to lower fiber counts. If the fiber count exceeds allowable limits stop all work, leave negative air system in operation undertake corrective action, and notify Consultant. Do not recommence work until authorized in writing by Consultant.

Stop Action Level (f/cc)	Immediate Stop Level (f/cc)	Minimum Respirator	Minimum Protection Factor
0.1	1.0	Half-face	10
0.5	5.0	PAPR	100
1.0	10.0	Type C Supplied Air	1,000

1. If airborne fiber counts exceed Immediate Stop Level given above for type of respiratory protection in use for any period of time, cease all work except corrective action. Do not recommence work until fiber counts fall below Stop Action Level given above for the type of respiratory protection in use. After correcting cause of high fiber levels, do not recommence work for 24 hours unless otherwise authorized, in writing, by Consultant.
2. Outside Work Area: If any air sample taken outside of the work area exceeds the baseline or 0.01 f/cc, whichever is higher, immediately stop all work. If this air sample was taken inside the building and outside of critical barriers around the work area, immediately erect new critical barriers to isolate the affected area from the balance of the building.
3. Analytical Procedure: Sampling and analysis shall be as per NIOSH 582 (7400 Method). The following procedure will be used to resolve any disputes regarding fiber types when a project has been stopped due to excessive airborne fiber counts in any area. "Airborne Fibers" referred to above include all fibers regardless of composition as counted in the NIOSH 582 (7400 Method). If work has stopped due to high airborne fiber counts and the Contractor disputes the work stoppage, air samples will be secured in the same area by the Consultant for analysis by transmission electron microscopy. The costs for all sampling required to resolve disputes are the responsibility of the Contractor.

1.2 SCHEDULE OF AIR SAMPLES

A. Before Start of Work

The Consultant will secure the following air samples to establish a baseline before start of work:

Location	Number of Samples	Analytical Procedure	Detection Limit Fibers/cc	Minimum Volume (Liters)	Rate Liters/Minute
Per Area	5	PCM	0.01	1200	2-10

Baseline is an action level expressed in fibers per cubic centimeter, which is the highest of the samples collected on cellulose ester filters, or 0.010 fibers per cubic centimeter. The number and frequency of baseline samples may be modified at the Owner's discretion.

B. Daily

From start of site work through the work of Section 0190: Project Decontamination, the Consultant shall take samples on a daily or as needed basis.

Location

Samples will be collected on 25-mm cassettes with the following filter media: PCM: 0.8 micrometer mixed cellulose ester.

Location Sampled	Number of Samples	Analysis Method	Sampling Sensitivity Fibers/cc.	Minimum Volume (Liters)	Rate (LPM)
Clean Room	1	PCM	0.010	900	2-10
Outside of Waste Load-out Areas	1	PCM	0.010	900	2-10
Critical Barriers	1	PCM	0.010	900	2-10
Inside Work Area	1	PCM	0.010	900	2-10
Negative Air Output	1	PCM	0.010	900	2-10

The number and frequency of samples may be modified at the Owner's discretion. If airborne fiber counts exceed allowed limits, additional samples will be taken as necessary to monitor fiber levels.

C. Clearance

All final clearance samples shall be collected under dry conditions using aggressive techniques. Aggressive techniques should be conducted in accordance with Appendix M of the 1985 United States Environmental Protection Agency document "*Guidance for Controlling Asbestos-Containing Materials in Buildings*" (the Purple Book). All barriers, except critical barriers, shall be removed for final clearance, unless the abatement area is not isolated from adjacent areas, or aggressive techniques are likely to contaminate adjacent areas.

A minimum of five clearance samples shall be collected for each area clearance when the activities involve gross abatement of friable materials. For gross abatement areas greater than 5,000 square feet or 50,000 cubic feet, an additional sample is required for each additional 2,500 square feet or 25,000 cubic feet, whichever is more stringent (e.g., an enclosure of 10,000 square feet or 100,000 cubic feet would require 7 clearance samples).

The clearance criteria for all PCM clearance air samples is less than 0.01 fibers/cubic centimeter.

1.3 TESTING/MONITORING

A. Laboratory Testing

1. The environmental contractor shall provide the consultant with laboratory certifications.
2. The services of a testing laboratory shall be employed by the Contractor to perform laboratory analysis of the OSHA compliance air samples. A complete record, certified by the testing laboratory, of all Contractor air monitoring tests and results will be furnished to the Consultant.
3. Written Reports: Copies of all OSHA compliance air monitoring test results will be posted at the job site on a daily basis.

B. Contractor Testing

The Contractor may conduct his own air monitoring and laboratory testing to determine airborne fiber counts both inside and outside the work area. The cost of such air monitoring and laboratory testing will be at the Contractor's expense.

C. Contractor Personal Monitoring

The Contractor shall perform air monitoring as required to meet OSHA requirements for maintenance of Time Weighted Average (TWA) fiber counts for types of respiratory protection provided. Data from this sampling will be provided to Consultant verbally, on a daily basis to verify adequate respiratory protection. A complete record of all air monitoring and results will be provided to the Consultant on laboratory letterhead on a weekly basis. Contractor must retain unused portions of all samples until project closeout (Section 0200).

The consultant has the right to perform personnel monitoring whenever it is considered necessary to document exposures to the workers and/or the general public. Personnel air monitoring may be used to supplement area monitoring inside the enclosure but may not be used in lieu of area monitoring required inside the enclosure.

D. Authority to Stop Job Activities

The Consultant shall have the authority to stop any job activities that are not being performed satisfactorily or in accordance with applicable regulations and the requirements of this specification, without additional charges by the Contractor to the Consultant, or the Building Owner. This shall not relieve the Contractor from liability for violating these regulations or guidelines. The Consultant is relying on the Contractor's expertise in the abatement of asbestos-containing waste materials. The Contractor shall be responsible for knowing these laws and regulations, and shall, at all times, comply with them.

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0140 – TEMPORARY FACILITIES AND UTILITIES

PART 1 – GENERAL

1.1 GENERAL REQUIREMENTS

A. Description of Requirements

Provide temporary connection to existing building utilities or provide temporary facilities as required herein or as necessary to carry out the work.

1.2 PRODUCTS

A. Materials and Equipment

Provide new or used materials and equipment that are undamaged and in serviceable condition. Provide only materials and equipment that are recognized as being suitable for the intended use, by compliance with appropriate standards.

1. Scaffolding

- a. Provide all scaffolding, ladders and/or staging, etc., as necessary to accomplish the work of this contract. Scaffolding may be of suspension type, or standing type such as metal tube and coupler, tubular welded frame, pole or outrigger type or cantilever type. The type, erection and use of all scaffolding shall comply with all applicable OSHA provisions.
- b. Equip rungs of all metal ladders, etc., with an abrasive non-slip surface.
- c. Provide a nonskid surface on all scaffold surfaces subject to foot traffic.

2. Water Service

- a. Temporary Water Service Connection: All connections to the water system shall be at a location designated by the Consultant and shall include backflow protection. Valves shall be temperature and pressure rated for operation of the temperatures and pressures encountered. After completion of use, connections and fittings shall be removed without damage or alteration to existing water piping and equipment. Leaking or dripping valves shall be piped to a drain or located over an existing sink or grade so that water will not damage existing finishes or equipment.
- b. Water Hoses: Employ heavy-duty abrasion-resistant hoses with a pressure rating greater than the maximum pressure of the water distribution system to provide water into each work area and to each Decontamination Unit. Provide fittings as required to allow for connection to existing wall hydrants or spouts, as well as temporary water heating equipment, branch piping, showers, shut-off nozzles and equipment.

3. Electrical Service

- a. General: Comply with applicable NEMA, NECA and UL standards and governing regulations for materials and layout of temporary electric service.
- b. Temporary Power: Provide service from a distribution panel designated by the Consultant. Subpanel and disconnect shall be sized and equipped to accommodate all electrical equipment required for completion of the work.
- c. Voltage Differences: Provide identification warning signs at power outlets which are other than 110-120 volt power. Provide polarized outlets for plug-in type outlets, to prevent insertion of 110-120 volt plugs into higher voltage outlets.
- d. Ground Fault Protection: Provide all receptacle outlets equipped with ground fault circuit interrupters, reset button and pilot light, for plug-in connection of power tools and equipment.
- e. Electrical Power Cords: Use only grounded extension cords; use "hard-service" cords where exposed to abrasion and traffic. Use single lengths or use waterproof connectors to connect separate lengths of electric cords, if single lengths will not reach areas of work.
- f. Lamps and Light Fixtures: Provide general service incandescent lamps of wattage indicated or required for adequate illumination. Protect lamps with guard cages or tempered glass enclosures, where fixtures are exposed to breakage by construction operations. Provide exterior fixtures where fixtures are exposed to the weather or moisture.

4. First Aid

First Aid Supplies: Comply with governing regulations and recognized recommendations within the construction industry. This is to be included in Contractors Health and Safety Plan.

1.3 EXECUTION

- A. General:** Use qualified tradesmen for installation of temporary services and facilities. Locate temporary services and facilities where they will serve the entire project adequately and result in minimum interference with the performance of the Work. Relocate, modify and extend services and facilities as required during the course of work so as to accommodate the entire work of the project.

1. Scaffolding

- a. During the erection and/or moving of scaffolding, care must be exercised so that the polyethylene floor covering is not damaged.
- b. Clean as necessary debris from non-slip surfaces.

- c. At the completion of abatement work, clean all construction aids within the work area, wrap in one layer of 6-mil polyethylene sheet and seal before removal from the work area.

2. Water Service

- a. General: Provide temporary water connections (at Contractor's expense) to a potable water supply. Supply hot and cold water to the Decontamination System in accordance with Section 0185.
- b. Maintain hose connections and outlet valves in leak proof condition. Where spillage or leakage might damage finish work below an outlet, provide a drip pan of suitable size to minimize the possibility of water damage. Drain water promptly from pans as it accumulates.

3. Electrical Service

- a. General: Provide a weatherproof, grounded temporary electric power service and distribution system of sufficient size, capacity, and power characteristics to accommodate performance of work during the construction period. Install temporary lighting adequate to provide sufficient illumination for safe work and traffic conditions in every area of work.
 - i. Power Distribution System: Provide circuits of adequate size and proper characteristics for each use. In general, run wiring overhead, and rise vertically where wiring will be least exposed to damage from construction operations.
 - ii. Ground Fault Circuit Interrupters (GFCI) shall protect all electrical power used in work areas.

4. Temporary Lighting

- a. Provide lighting where natural lighting or existing building lighting does not meet the adequate light level:
- b. Provide lighting in the Decontamination Unit as required.

5. Temporary Heat

- a. General: Provide temporary heat where indicated or needed for performance of the Work.
- b. Maintain a minimum temperature of 70 degrees F in the shower area of the decontamination unit.

6. Fire Extinguishers

Comply with the applicable recommendations of NFPA Standard 10 - "Standard for Portable Fire Extinguishers." Locate fire extinguishers where they are most convenient and effective for their intended purpose, but provide not less than one extinguisher in each Work Area, in Equipment Room, and one outside Work Area (or 5000 feet of work area) in Clean Room.

7. Sanitary Facilities

If necessary, the Contractor will provide one self-contained chemical toilet unit outside the work area for each 10 workers. Facilities shall be maintained throughout the duration of the site work.

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0145 – NEGATIVE PRESSURE SYSTEMS

PART 1 – GENERAL

1.1 GENERAL REQUIREMENTS

- A.** Before start of work, submit design of negative air system to the Consultant for review. Do not begin work until submittal is returned with the Consultant's action stamp indicating that the submittal has been approved for unrestricted use. Include in the submittal at a minimum:
1. Number of air filtration devices (AFD) required to meet the 4 air changes/hour and the calculations necessary to determine the number of machines.
 2. Description of projected air flow within work area and methods required to provide adequate air flow in all portions of the work area.
 3. Description of methods of testing for correct airflow and pressure differentials.
 4. Manufacturer's product data on the machines to be used and date verification of HEPA filters employed.
 5. Location of the machines in the work space.
 6. Method of supplying adequate power to the machines and designation of building electrical panel(s) which will be supplying the power.
 7. Description of work practices to insure that airborne fibers travel downstream from workers.
 8. Manufacturer's product data on equipment used to monitor pressure differential between inside and outside of work area.

B. Quality Assurance

Field test HEPA filters daily by smoke detection method to confirm proper operation.

Monitor pressure differential across Decontamination Unit by smoke detection method on a daily basis.

1.2 PRODUCTS

- A. Negative Air Filtration Devices (AFD) - General:** Supply the required number of AFD units to the site in accordance with these specifications. Each unit shall include the following:
1. Cabinet: Constructed of steel or other durable materials able to withstand damage from rough handling and transportation. The width of the cabinet should be less than 30 inches to fit through standard-size doorways. Cabinet

shall be factory sealed to prevent asbestos-containing dust from being released during use, transport, or maintenance. Access to and replacement of all air filters shall be from intake end. Unit shall be mounted on casters or wheels.

2. Fans: Rate capacity of fan according to usable air-moving capacity under actual operating conditions.
3. HEPA Filters: The final filter shall be the HEPA type. The filter media (folded into closely pleated panels) must be completely sealed on all edges with a structurally rigid frame.
 - a. A continuous rubber gasket shall be located between the filter and the filter housing to form a tight seal.
 - b. Each filter shall be individually tested and certified by the manufacturer to have an efficiency of not less than 99.97 percent when challenged with 0.3 um dioctylphthalate (DOP) particles. Each filter shall bear a UL586 label to indicate ability to perform under specified conditions.
 - c. Each filter shall be marked with: the name of the manufacturer, serial number, air flow rating, efficiency and resistance, and the direction of test air flow.
4. Prefilters, which protect the final filter by removing the larger particles, are required to prolong the operating life of the HEPA filter. Two stages of prefiltration are required. The first-stage prefilter shall be a low-efficiency type (e.g., for particles 10 um and larger). The second-stage (or intermediate) filter shall have a medium efficiency (e.g., effective for particles down to 5 um). Prefilters and intermediate filters shall be installed either on or in the intake grid of the unit and held in place with special housings or clamps.
5. Instrumentation: Each unit shall be equipped with a manometer to measure the pressure drop across filters and indicate when filters have become loaded and need to be changed. A table indicating the usable air-handling capacity for various static pressure readings on the manometer shall be affixed near the gauge for reference, or the manometer reading indicating at what point the filters should be changed, noting Cubic Feet per Minute (CFM) air delivery at that point. Provide units equipped with an elapsed time meter to show the total accumulated hours of operation.
6. Safety and Warning Devices: The unit shall have an electrical (or mechanical) lockout to prevent fan from operating without a HEPA filter. Units shall be equipped with automatic shutdown system to stop fan in the event of a major rupture in the HEPA filter or blocked air discharge. Warning lights are required to indicate normal operation, too high a pressure drop across the filters (i.e., filter overloading), and too low of a pressure drop (i.e., major rupture in HEPA filter or obstructed discharge).
7. Electrical components shall be approved by the National Electrical Manufacturers Association (NEMA) and Underwriter's Laboratories (UL). Each unit shall be equipped with overload protection sized for the equipment. The motor, fan, fan housing, and cabinet shall be grounded.

1.3 EXECUTION

A. Pressure Differential

Provide a fully operational negative air system within the work area maintaining continuously a pressure differential across work area. Demonstrate to the Consultant the pressure differential by use of smoke tube testing.

B. Monitoring

At the beginning and end of each work day, the Contractor shall test the pressure differential between the work area and the outside of the building by use of smoke tube testing.

C. Air Movement Calculations

Determine Number of AFD Units needed to achieve four air change/hour rate. Capacity of a unit for purposes of this section is the capacity in cubic feet per minute with fully loaded filters (pressure differential which causes loaded filter warning light to come on) in the machines labeled operating characteristics (assume 75% operating efficiency).

Number of AFDs needed:

$$\frac{\text{Ventilation Requirement (CFM)}}{\text{Capacity of Unit with Loaded Filters (CFM)} \times 0.75}$$

Have available a minimum of one (1) additional unit as a backup in case of equipment failure or machine shutdown for filter changing.

D. Location of AFD Units

Locate AFD unit(s) so that makeup air enters work area primarily through supplemental makeup air inlets and decontamination facilities, and traverses work area as much as possible. This may be accomplished by positioning the exhaust unit(s) at a maximum distance from the worker access opening or other makeup air sources.

E. Vent to outside of building, unless authorized in writing by the Consultant.

F. Supplemental Makeup Air Inlets

Provide where required for proper air flow through the work space in locations approved by the Consultant dampered inlets that allow air from outside the building into the work area. Locate makeup air inlets as needed to achieve air flow across work area. Cover air inlets with flaps to reseal automatically if the negative pressure system should shut down for any reason.

G. Electrical Service

Each AFD unit shall be serviced by a dedicated circuit with overload device tied into an existing building electrical panel which has sufficient spare capacity to accommodate the load. All electrical supply to the work areas will be protected by a Ground Fault Circuit Interrupter (GFCI).

H. Testing the System

Test negative pressure system before any asbestos-containing material is wetted or removed. After the work area has been prepared, the decontamination facility set up, and the exhaust unit(s) installed, start the unit(s) (one at a time). Demonstrate operation and testing of negative pressure system, air flow and pressure differential to the Consultant:

1. Plastic barriers and sheeting move lightly in toward work area,
2. Curtain of decontamination units move lightly in toward work area,
3. There is a noticeable movement of air through the decontamination unit. Use smoke tube daily to demonstrate air movement from Clean Room to Shower Room, from Shower Room to Vacuum Zone, and from Vacuum Zone to Work Area,
4. Use smoke tubes to demonstrate a positive motion of air across all areas in which work is to be performed.

Modify the negative pressure system as necessary to successfully demonstrate the above.

I. Use of System During Abatement Operations

1. Start AFD units before beginning work (before any asbestos-containing material is disturbed). After abatement work has begun, run units continuously to maintain a constant negative pressure until decontamination of the work area is complete.
2. Do not shut down negative air system during encapsulating procedures, unless authorized by the Consultant in writing.
3. Start abatement work at a location farthest from the AFD units and proceed toward them. If an electric power failure occurs, immediately stop all abatement work and do not resume until power is restored and AFD units are operating again.
4. At completion of abatement work, allow AFD units to run as specified under section 0190, to remove airborne fibers that may have been generated during abatement work and cleanup and to purge the work area with clean makeup air. The units may be required to run for a longer time after decontamination if dry or only partially wetted asbestos material was encountered during any abatement work.

J. Dismantling the System

When the final inspection and the results of final air tests indicate that the area has been decontaminated, AFD exhaust units shall be removed from the work area. Before removal from the work area, remove and properly dispose of pre-filter, and seal intake to the AFDs with 6-mil polyethylene to prevent environmental contamination from the filters.

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0150 – LOCAL AREA PROTECTION

PART 1 – GENERAL

1.1 DESCRIPTION

The local area is any area adjacent to the work area that is affected by this project. It includes:

- A.** Adjacent buildings
- B.** Staging and storage areas
- C.** Areas isolated by critical barrier

1.2 SUBMITTALS

- A.** Standard Operating Procedures
- B.** Safety Plan with emergency phone numbers of fire department, rescue, hospital and ambulance services

1.3 Contact fire control agencies to review procedures prior to start of work.

1.4 Contact hospital facility to review procedures prior to start of work.

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0156 – FULL CONTAINMENT

PART 1 – GENERAL

1.1 FULL CONTAINMENT

- A. Contractor shall meet the requirements of Federal, State and Local regulations.
- B. Identify with Consultant all existing damages to property and/or equipment in the work area and record extent of damage prior to commencement of work.
- C. The asbestos abatement area shall be totally isolated from the rest of the building.
- D. Permit access to work area only through the decontamination system. All other means of access shall be closed off, sealed and warning signs displayed.
- E. Decontamination facilities shall be constructed by the abatement Contractor to include a clean change room, a shower room, and an equipment room, utilizing standard triple flaps between each room as per Section 0185 – Decontamination Systems. Each room shall be a minimum of 4' x 4' with two layers of 6-mil polyethylene (plastic) on all walls, floors, and ceiling. Contaminated water generated in the shower room shall be filtered using a minimum two-stage system of a 50 and a 0.5 micron filter prior to discharge.
- F. Air filtration devices (AFDs) equipped with HEPA filters shall be supplied by the Contractor as per Section 0145 – Negative Pressure Systems. A minimum of four (4) air changes per hour are required in the work area. Air that has been exhausted from the enclosure shall be HEPA filtered and discharged outside of the building.
- G. Contractor shall fill all penetrations through slabs, empty holes, holes accommodating cable, piping, HVAC duct, conduit, etc.
- H. Individually clean and cover all windows. HEPA vacuum and wet-wipe all horizontal surfaces. Cover windows with one layer of clear 6-mil poly secured with duct tape and spray adhesive.
- I. Cover entire inside surfaces of all walls, including the windows and doorways, with 1 layer of 6-mil poly sheeting secured with duct tape and spray adhesive. Cover entire ceiling surface with one layer of 6-mil poly and seal in the same manner.
- J. The Consultant shall conduct a pre-abatement inspection. When pre-abatement requirements are met, written authorization to proceed with abatement shall be given to the Contractor. If authorization to proceed is not given, a "punch list" of items to address will be provided to the Contractor.
- K. Material to be removed within full containment shall be thoroughly wetted and amended water prior to abatement. Personal Protective Equipment, including respiratory protection, shall be in accordance with OSHA 29 CFR 1926.1101.

- L.** A separate decontamination system shall be constructed for equipment, supplies, and ACM waste disposal. The decontamination system shall consist of a 3-chamber area, lined with two layers of 6-mil poly, and separated from the work zone, each other, and the clean zone by standard triple 6-mil poly flaps (if applicable).
- M.** The asbestos abatement Contractor shall request a pre-sealant inspection by the Consultant when all visible ACM is removed from the work area and surface cleaning has been performed. If the visual inspection is unacceptable, a "punch list" of discrepancies to be cleared will be provided before written authorization to proceed is given (Section 0190. Project Decontamination).
- N.** When written authorization has been given, the entire work area shall be sprayed with an approved encapsulant prior to clearance air sampling.
- O.** Clearance air sampling shall be conducted by the Consultant in accordance with Section 0135 - Test Laboratory Services and Section 0195 - Work Area Clearance. Upon receipt of work area clearance results, the Contractor shall complete the containment area per Section 0200 – Work Area Closeout.
- P.** All ACM removed from the work area shall be properly bagged, labeled, and disposed as asbestos waste in an approved landfill. The Contractor shall provide all required manifests and receipt (Section 2030).

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0162 – FIRE DOORS

PART 1 – GENERAL

1.1 FIRE DOORS

- A.** The Contractor shall meet the requirements of federal, State and local regulations.
- B.** Demarcate the work area with asbestos danger tape and 6-mil poly sheeting on the floor.
- C.** The doors shall be removed with the insulation intact. Prior to removing the door all holes or penetrations shall be sealed with duct tape. The individuals removing the doors shall wear appropriate personal protective equipment (Respirator, disposable suites and safety equipment. The material shall be wetted were feasible and wrapped into layers of 6-mil poly sheeting.
- D.** If any asbestos material falls on the floor it shall be cleaned up utilizing HEPA vacuum or wet wiping the area.
- E.** All asbestos containing materials removed from the work area shall be properly bagged, labeled, and disposed as asbestos waste in an approved landfill. The Contractor shall provide all required manifests and receipts (Section 2030).

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0164 – WET DEMOLITION ABATEMENT ACTIVITIES

PART 1 – GENERAL

1.1 WET DEMOLITION ABATEMENT ACTIVITIES

- A.** The Contractor shall meet the requirements of Federal, State and local regulations.
- B.** Work procedures for demolition of asbestos containing building.
 - 1. The area surrounding the house shall be secured by asbestos warning tape. The barrier shall extend out 50' from the building were feasible. Only certified asbestos workers/supervisors shall be permitted in the work area. This includes equipment operators, workers and supervisors coming into contact with asbestos contaminated materials.
 - 2. Personnel entering in the work area shall wear a minimum breathable disposable suit, half face negative pressure respirator with HEPA filters, safety glasses, hard hat, steel toe boots and appropriate hand protection. Disposal roll-off shall be lined with two layers of 6-mily plastic sheeting. Once the roll-off is full, the top shall be sealed with spray adhesive and duct tape. The sealed roll-off shall be labeled with OSHA asbestos markings, NESHAPS and DOT labels. A waste shipment record shall be provided to the driver to accompany the roll-off to the landfill.
 - 3. The building shall be sprayed with water during the demolition process to prevent visible dust emissions. The materials loaded into the disposal roll-off shall be adequately wetted before the plastic is sealed.
 - 4. The Contractor shall provide proper containment of water used during the prevention of visible dust emissions and assure that no asbestos contaminated water migrates from the site or to other areas of the site no contaminated with asbestos.
 - 5. Once the disposal of the building materials is completed the area shall be visually inspected to make sure all asbestos materials have been removed by the consultant.
 - 6. Work area air sampling shall be conducted by the Consultant in accordance with Section 0135 - Test Laboratory Services and Section 0195 - Work Area Clearance.
 - 7. All asbestos containing materials removed from the work area shall be properly bagged, labeled, and disposed as asbestos waste in an approved landfill. The Contractor shall provide all required manifests and receipts (Section 2030).

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0165 – ASBESTOS WINDOW CAULK

PART 1 – GENERAL

1.1 ASBESTOS WINDOW CAULK

- A.** The Contractor shall meet all the requirements of Federal, State and local regulations.
- B.** Work procedures for the removal of window caulk.
 - 1. The sidewalk shall be covered with a layer of 6-mil poly sheeting. The area shall be demarcated with warning tape and asbestos signs. Only certified asbestos workers/supervisors shall be permitted in the work area. This includes equipment operators, workers and supervisors coming into contact with asbestos contaminated materials.
 - 2. Personnel entering in the work area shall wear a minimum breathable disposable suit, half face negative pressure respirator with HEPA filters, safety glasses, hard hat, steel toe boots and appropriate hand protection. If necessary the workers shall also wear appropriate fall protection equipment.
 - 3. The material shall be sprayed with water to prevent any visible emissions and removed utilizing manual methods. The interior window (Contains Glazing) shall be removed first and double bagged or wrapped in two layers of 6-mil poly sheeting.
 - 4. HEPA vacuum to be used to clean any debris once the window frame has been removed. The floor poly sheeting shall be double bagged as asbestos waste.
 - 5. The work area shall pass a visual inspection.
 - 6. The work area air sampling shall be conducted by the Consultant in accordance with Section 0135 - Test Laboratory Services and Section 0195 - Work Area Clearance (Glovebagging Clearance Criteria).
 - 7. All asbestos containing materials removed from the work area shall be properly bagged, labeled, and disposed as asbestos waste in an approved landfill. The Contractor shall provide all required manifests and receipts (Section 2030).

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0166 – CLEARING AND GRUBBING

PART 1 – GENERAL

1.1 CLEARING AND GRUBBING

CLEARING

- A.** The Contractor shall meet all the requirements of Federal, State and local regulations.
- B.** The Contractor shall provide all labor, materials, tools and equipment necessary for clearing, grubbing, removing and disposing of all vegetation and debris (including earthen materials incidentally removed with vegetation and debris), and obstructions located within the limits shown on the Drawings or designated by the owner, except such objects as are designated to remain in place or are to be removed in accordance with other sections of these Specifications. The work shall also include the preservation from injury or defacement of all vegetation and objects designated to remain.
- C.** The owner will establish the limits of the work and will designate all trees, plants, shrubs and other items to remain. The Contractor shall protect and preserve all items designated to remain.
- D.** Miscellaneous trimming of trees or shrubs designated to remain shall be conducted when directed by the owner. Trimming shall be in accordance with good tree surgery practice.
- E.** All vegetation and debris to be removed shall be disposed of off-site by the Contractor. Burning shall not be permitted. The Contractor shall obtain all required permits.
- F.** The Contractor is responsible for:
 - 1. Securing waste disposal sites.
 - 2. Obtaining written permission of the owner of the disposal site and
 - 3. Securing any required permits.
- G.** The cost of securing such sites shall be borne by the Contractor. If requested by the owner, the Contractor shall furnish the permit numbers of all required permits for disposal sites.
- H.** Merchantable timber within the clearing limits will become the property of the Contractor, unless otherwise specified.

GRUBBING

- A.** All trees, stumps, roots and other objects not designated to remain shall be cleared and grubbed. If the area is not to be benched, the removal of undisturbed stumps and roots and nonperishable solid objects that will be a minimum of four feet below the embankment surface and that do not extend more than six inches above the original ground line, will not be required.

- B.** In areas outside of the grading limits of cut and embankment areas and to the established limits of the work, all stumps and nonperishable solid objects permitted to remain in place shall be cut off flush with the natural ground.
- C.** Stump holes and other holes from which obstructions are removed shall be backfilled with suitable materials and compacted in accordance with standard industry practices.

HAND CLEARING

- A.** In areas where Hand Clearing is indicated on the Drawings or designated by the owner, no equipment on wheels or tracks shall be used. Care shall be taken to insure that, where encountered, asbestos debris is not disturbed. Stumps shall be cut flush with the natural ground.

SELECTED TREE REMOVAL

- A.** Unless designated otherwise by the owner, all trees outside of the normal clearing and grubbing and/or hand clearing limits, shall be removed and disposed of in accordance with this Section. Trees not to be removed may be designated by the owner at any time during the performance of the contract, and may be subject to the conditions specified under Hand Clearing. Trees designated for removal shall be cut off flush with the natural ground.

REMOVE AND RELOCATE BUSH OR TREE

- A.** Bushes or trees selected by the owner for removal and relocation shall be removed and relocated as directed by the owner.
- B.** Bushes and trees designated for removal and relocation shall be carefully removed with enough of the root wad kept intact to ensure the survival of the bush or tree in its new locations. Bushes and trees designated for removal and relocation that are damaged, or that do not survive as a result of the transplanting, shall be replaced by the Contractor at its expense.

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0175 – WORKER PROTECTION

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

This section describes the equipment and procedures required for protecting workers against asbestos contamination and other workplace hazards except for respiratory protection (refer to Section 0130 for requirements for Training and Medical Exam).

1.2 EQUIPMENT

A. Protective Clothing

1. Coveralls: Provide disposable full-body coveralls, disposable underwear, and disposable head covers, and require that they be worn by all workers in the work area. Provide a sufficient number for all required changes for all workers in the work area, and a minimum of 3/day for visitors and regulatory officials.
2. Boots: Provide safety-toe footwear according to OSHA 1910.136 with non-skid soles that provide adequate foot protection for all workers. Do not allow boots to be removed from the work area after being contaminated with ACM unless thoroughly decontaminated.
3. Hard Hats: Provide head protection (hard hats) as required by OSHA 1910.135 for all workers. The environmental contractor shall several hard hats for visitors. Require hard hats to be worn at all times that work is in progress that may potentially cause head injury. Provide hard hats of type with plastic strap type suspension. Require hard hats to remain in the work area throughout the work. Thoroughly clean, decontaminate and bag hats before removing them from work area at the end of the work.
4. Goggles: Provide eye protection (goggles) as required by OSHA 1910.133 for all workers involved in scraping, spraying, or any other activity which may potentially cause eye injury. Goggles are to remain in the work area until thoroughly decontaminated.
5. Gloves: Provide work gloves to all workers that provide adequate hand protection and require that they be worn at all times. Do not remove gloves from work area and dispose of as asbestos contaminated waste at the end of the work.

B. Additional Protective Equipment

Disposable coveralls, head covers, and footwear covers shall be provided by the Contractor for the Consultant and other authorized representatives who may inspect the job site.

1.3 EXECUTION

- A. GENERAL:** Provide worker protection as required by the most stringent OSHA and/or EPA standards applicable to the work. The following procedures are minimums to be adhered to regardless of fiber count in the work area.
- B.** Each time work area is entered, remove all street clothes in the Changing Room of the Personnel Decontamination System and put on new disposable underwear, coverall, new head cover, booties and with appropriate respiratory protection.
- C. Decontamination Procedures**
1. Require all workers to adhere to the following personal decontamination procedures whenever they leave the work area:
 2. Type C Supplied Air or Powered Air-Purifying Respirators: Require that all workers use the following decontamination procedure as a minimum requirement whenever leaving the work area:
 - a. When exiting area, remove disposable underwear, coveralls, disposable head covers, and disposable footwear covers or boots in the vacuum zone. Deposit in labeled 6-mil bag for disposal.
 - b. Using a HEPA vacuum, remove any debris adhering to body, hair, or respirator.
 - c. Still wearing respirators, proceed to showers. (If using supplied air respirator, disconnect from airline and properly protect supply line.) Showering is mandatory. Care must be taken to follow reasonable procedures in removing the respirator to avoid asbestos fibers while showering. The following procedure is required as a minimum:
 - i. Thoroughly wet body including hair and face. If using a Powered Purifying Air-Respirator (PAPR), hold blower unit above head to keep canisters dry.
 - ii. With respirator face piece still in place, thoroughly wash body, hair, respirator face piece, and all parts of the respirator except the blower unit and battery pack on a PAPR. Pay particular attention to seal between face and respirator and under straps.
 - iii. Take a deep breath, hold it and/or exhale slowly, completely wet hair, face, and respirator. While still holding breath, remove respirator and hold it away from face before starting to breathe.
 - iv. Carefully wash face piece of respirator inside and out. If using PAPR: shut down in the following sequence, first cap inlets to filter cartridges, and then turn off blower unit (this sequence will help keep debris which has collected on the inlet side of filter from dislodging and contaminating the outside of the unit). Thoroughly wash blower unit and hoses. Carefully wash battery pack with wet rag. Be extremely cautious of getting water in battery pack as this will short out and destroy battery.
 - v. Shower completely with soap and water.

- vi. Rinse thoroughly.
 - vii. Rinse shower room walls and floor prior to exit.
 - d. Proceed from shower to Changing Room and change into street clothes or into new disposable work items.
3. Air Purifying-Negative Pressure Respirators: Require that all workers use the following decontamination procedure as a minimum requirement whenever leaving the work area with a half or full face cartridge type respirator:
- a. When exiting area, remove disposable underwear, coveralls, disposable headcovers, and disposable footwear covers or boots in the vacuum zone. Deposit in labeled 6-mil bag for disposal.
 - b. Using a HEPA vacuum, remove any debris adhering to body, hair, or respirator.
 - c. Still wearing respirators, proceed to showers. Showering is mandatory. Care must be taken to follow reasonable procedures in removing the respirator and filters to avoid asbestos fibers while showering. The following procedure is required as a minimum:
 - i. Thoroughly wet body from neck down.
 - ii. Wet hair as thoroughly as possible without wetting the respirator filter is using air purifying type respirator.
 - iii. Take a deep breath, hold it and/or exhale slowly, complete wetting of hair thoroughly wetting face, respirator and filter (air purifying respirator). While still holding breath, remove respirator and hold it away from face before starting to breathe.
 - iv. Dispose of wet filters from air purifying respirator.
 - v. Carefully wash facepiece of respirator inside and out.
 - vi. Shower completely with soap and water.
 - vii. Rinse thoroughly.
 - viii. Rinse shower room walls and floor prior to exit.
 - d. Proceed from shower to Changing Room and change into street clothes or into new disposable work items.
- D. Require that workers NOT eat, drink, smoke, chew gum or tobacco in the work area. To eat, chew, drink or smoke, workers shall follow the procedure described above, and then dress in street clothes before entering the non-work areas of the building.

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0180 – WORKER PROTECTION

PART 1 – GENERAL

1.1 GENERAL

A. Description of Work

Contractor will supply sufficient quantity of respiratory equipment.

1. Provide adequate protection against airborne concentrations of asbestos fibers, and;
2. Instruct and train each worker involved in asbestos abatement of ACM in proper respiratory use and require that each worker always wear a respirator, properly fitted on the face, in the work area from the start of work until the work area is completely decontaminated. Use respiratory protection appropriate for the fiber level encountered in the work place or as required for other toxic or oxygen-deficient situations encountered.

B. Standards

Except to the extent that more stringent requirements are written directly into the Contract Documents, the following regulations and standards have the same force and effect (and are made a part of the Contract Documents by reference) as if copied directly into the Contract Documents, or as if published copies were bound herewith. Where there is a conflict in requirements set forth in these regulations and standards, meet the more stringent requirement. The following are incorporated:

OSHA- U.S. Department of Labor Occupational Safety and Health Administration, Safety and Health Standards 29 CFR 1910, Section 1001 and Section 1910.134. 29 CFR 1926.1101

CGA - Compressed Gas Association, Inc., New York, Pamphlet G-7, "Compressed Air for Human Respiration," and Specification G-7.1 "Commodity Specification for Air."

CSA - Canadian Standard Association, Rexdale, Ontario, Standard Z180.1-1978, "Compressed Breathing Air."

ANSI - American National Standard Practices for Respiratory Protection, ANSI Z88.2-1992.

NIOSH- National Institute for Occupational Safety and Health

MSHA- Mine Safety and Health Administration

C. Submittals

Before start of work, submit to the Consultant for review documents specifically outlining Contractor's respiratory protection plan, and a contingency plan to meet any elevated fiber concentrations. Do not begin work until these submittals are returned

with the Consultant's approval indicating that the submittal is returned for unrestricted use.

1.2 EQUIPMENT

A. Air Purifying Respirators

1. Respirator Bodies: Provide half face or full face type respirators. Equip full-face respirators with a nose cup or other anti-fogging device.
2. Filter Cartridges: Provide, at a minimum, HEPA type filters labeled with NIOSH and MSHA Certification and color coded in accordance with ANSI Z88.2-1992.
3. Non-permitted respirators: Do not use single use, disposable or quarter face respirators.

B. Powered Air Purifying Respirators

Powered air purifying - half or full face mask: Supply a sufficient quantity of high efficiency respirator filters approved for asbestos so that workers can change filters at any time that flow through the face piece decreases to the level at which the manufacturer recommends filter replacement. Require that HEPA elements in filter cartridges be protected from wetting during showering. Require entire exterior housing of respirator including blower unit, filter cartridges, hoses, battery pack, face mask, belt, and cords to be washed each time a worker leaves the work area. Caution should be used to avoid shorting battery pack during washing. Provide an extra battery pack for each respirator so that one can be charging while one is in use.

C. Supplied Air Respirator Systems

1. Provide air used for breathing in Type "C" supplied air respiratory systems that meet or exceed standards set for Grade D or CSA Z180.1, whichever presents the more stringent quality standard.
2. Provide air used for breathing in Type "C" supplied air respiratory systems that meet or exceed standards.
3. Provide equipment capable of producing air of the quality and volume required by the job site conditions and crew size. Comply with provisions of this specification if more stringent than the governing standard.
4. Face Piece and Hose: Provide full face piece and hose by same manufacturer that has been certified by NIOSH/MSHA as an approved Type "C" respirator assembly operating in pressure demand mode with a positive pressure face-piece.
5. Auxiliary backup system: In atmospheres which contain sufficient oxygen (greater than or equal to 19.5% oxygen) provide a pressure-demand full face piece supplied air respirator equipped with an emergency escape system.
6. Escape air supply: In atmospheres which are oxygen deficient (less than 19.5% oxygen) provide a pressure-demand full face piece supplied air respirator incorporating an auxiliary self-contained breathing apparatus (SCBA) which

automatically maintains an uninterrupted air supply in pressure demand mode with a positive pressure face piece.

7. Backup air supply: Provide a reservoir of compressed air located outside the work area which will automatically maintain a continuous uninterruptible source of air available to each connected face piece and hose assembly in the event of compressor shut-down, contamination of air delivered by compressor, power loss or other failure. Provide sufficient capacity in the back-up air supply to allow a minimum escape time of five minutes.
8. Warning device: Provide a warning device that will operate independently of the building's power supply. Locate so that alarm is clearly audible above the noise level produced by equipment and work procedures in use, in all parts of the work area and at the compressor. Connect alarm to warn of:
 - a. Compressor shut down or other fault requiring use of backup air supply,
 - b. Carbon Monoxide (CO) levels in excess of 5 ppm by volume.
9. Carbon Monoxide (CO) Monitor: Continuously monitor and record CO levels. Place monitors in the air line between compressor and backup air supply and between backup air supply and workers. Connect monitors so that they also sound an alarm as specified under "Warning Devices."
10. Compressor Shut Down: Interconnect monitors, alarms and compressor so that compressor is automatically shut down and the alarms sound if any of the following occur:
 - a. CO concentrations exceed 5 ppm/v in the air line between the filter bank and backup air supply,
 - b. Compressor temperature exceeds normal operating range.
11. Compressor Location: Locate compressor in a location that will supply air free of contaminants, and will not impede access to the building, and that will not cause a nuisance by virtue of noise or fumes to occupied portions of the building.
12. Air Intake: Locate air intake remotely from any source of automobile exhaust, any exhaust from motors, or buildings and other airborne contaminants.
13. After Cooler: Provide an after cooler at entry to filter system which is capable of reducing temperatures to outside ambient air temperatures.
14. Self Contained Breathing Apparatus (SCBA): Configure system to permit the recharging of 1/2 hour 2260 PSI SCBA cylinders.

1.3 EXECUTION

A. General

1. Respiratory Protection Program: Provide all personnel, authorized visitors and inspectors with respiratory protective equipment approved by OSHA and NIOSH. Comply with ANSI Z88.2-1992. "Practices for Respiratory Protection" and OSHA 29 CFR 1910 and 1926. Respirators will be approved by NIOSH.
2. Require that a respirator be worn by anyone in a work area at all times, regardless of activity, until the area has been cleared for re-occupancy in accordance with Section 0195.
3. Regardless of Airborne Fiber Levels: Require that the minimum level of respiratory protection used be half-face air-purifying respirator with high efficiency filters.

B. Fit Testing

1. All respirator wearers shall have a current fit test on the respirators he/she uses, using one of the protocols listed in Appendix C of OSHA. The fit tests must have been performed within the past year.
2. Upon each wearing: Require that each time an air-purifying respirator is put on, it be checked for fit with a positive or negative pressure fit test in accordance with the manufacturer's instructions of ANSI Z88.2-1992.
3. Personnel wearing respiratory protection must have no facial hair that would interfere with the face to facepiece seal of the respirator.

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0185 – DECONTAMINATION SYSTEMS

PART 1 – GENERAL

1.1 GENERAL

A. DESCRIPTION OF WORK

Provide separate personnel and equipment decontamination facilities. The Personnel Decontamination Unit is the only means of ingress and egress for the work area. All materials exit the work area through the Equipment Decontamination unit. Where feasible a separate disposal decon unit shall be installed.

1.2 PRODUCTS

- A. **Polyethylene Sheet:** Use single polyethylene film in the largest sheet size possible to minimize seams, 6-mil thick, clear, frosted, or black.
- B. **Duct Tape:** Provide duct tape in 2" or 3" widths with an adhesive which is formulated to aggressively stick to sheet polyethylene.
- C. **Spray Cement:** Provide spray adhesive in aerosol cans which is specifically formulated to stick tenaciously to sheet polyethylene.
- D. **Shower Unit:** Provide a self contained shower unit(s). One shower for each eight workers on-site. Water from the shower unit will be passed through a minimum of 50 micron and 0.5 micron filters prior to discharge to sanitary sewer.
- E. **Shower Head and Controls:** Provide a factory made shower head producing a spray of water which can be adjusted for spray size and intensity. Feed shower with water mixed from hot and cold supply lines.
- F. **Filters:** Provide cascaded filter units on drain lines from showers or any other water source carrying asbestos contaminated water from the work area. Provide units with disposable filter elements as indicated. Connect so that discharged water passes primary filter and output of primary filter passes through secondary filter.
 - 1. Primary Filter - pass particles 50 microns and smaller.
 - 2. Secondary Filter - pass particle .5 microns and smaller.
- G. **Hose Bib:** Provide heavy bronze angle type with wheel handle, vacuum breaker, and 3/4" National Standard male hose outlet.
- H. **Shower Stall:** For Wash Down Station provide leak tight shower enclosure with integrated drain pan fabricated from fiberglass or other durable waterproof material, approximately 3'x3' square with minimum 6' high sides and back. Structurally support as necessary for stability. Equip with hose bib, as specified in this section, mounted at approximately 4'-0" above drain pan. Connect drain to a reservoir, pump water from reservoir through filters to a drain or store and use for amended water. Mount filters inside shower stall on back wall

beneath hose bib.

- I. **Lumber:** Provide kiln-dried lumber of any grade or species.
- J. **Pump:** Provide waterproof pump to pump 2 times the flow capacity of all showers or hoses supplying water to the sump or sanitary sewer, through the filters specified herein when they are loaded to the extent that replacement is required. Provide unit capable of pumping debris, sand, plaster or other materials washed off during decontamination procedures without damage to mechanism of pump. Adjust pump so that a minimum of 3" remains between top of liquid and top of shower basin.
- K. **Water:** Shower water shall be heated to provide a comfortable supply to ensure adequate cleaning. Sufficient quantities of hot water shall be available for the entire crew to shower out in a reasonable time.
- L. **Soap and Towels:** Soap and towels shall be provided in sufficient quantities for the work crews.

1.3 . PART 3 - EXECUTION

A. Personnel Decontamination Unit

Provide a Personnel Decontamination Unit consisting of a serial arrangement of connected rooms or spaces, Changing Room, Drying Room, Shower Room, Equipment Room and Work Area. Require all persons in a full-containment, without exception, to pass through this decontamination unit for entry into and exiting from the work area for any purpose. Do not remove equipment or materials through Personnel Decontamination Unit. Provide temporary lighting protected by GFCI within decontamination units as necessary.

- 1. Changing Room (clean room): Provide a room that is for the purpose of changing into protective clothing. Construct using polyethylene sheeting, at least 6-mil in thickness, to provide an airtight seal between the Changing Room and the rest of the building. Locate so that access to Work Area from Changing Room is through Shower Zone.
 - a. Require workers to remove all street clothes in this room, dress in clean disposable underwear and coveralls, and don respiratory protection equipment. Do not allow asbestos contaminated items to enter this room.
 - b. An existing room may be utilized as the Changing Room, if it is suitably located and of a configuration whereby workmen may enter the Changing Room directly from the Shower Room. Protect all surfaces of room with sheet plastic.
 - c. Maintain floor of changing room dry and clean at all times. Do not allow overflow water from shower to wet floor in Changing Room.
 - d. Damp wipe all surfaces twice after each shift change with a disinfectant solution.
 - e. Provide a continuously adequate supply of bath towels.
 - f. Provide posted information for all emergency phone numbers and procedures.
 - g. Provide lockable storage for employees' street clothes and personal belongings.

2. Shower Zone: Workers entering a full-containment zone can bypass the shower units contained in the shower zone. Provide a completely water tight operational shower to be used for showering by workers exiting the Work Area after doffing disposable protective gear in the Equipment Room.
 - a. Separate this room for the Changing Room and Equipment Room with air tight walls fabricated out of 6-mil polyethylene.
 - b. Provide operable shower unit and filtration as described above.
 - c. Provide shower head and controls.
 - d. Provide temporary extensions of existing hot and cold water drainage, as necessary for a complete and operable shower.
 - e. Provide a soap dish and a continuously adequate supply of soap and maintain in sanitary condition.
 - f. Arrange water shut off and drain pump operation controls so that a single individual can shower without assistance from either inside or outside of the work area.
 - g. Pump waste water to drain or to storage for use in amended water or sanitary sewer. If pumped to sewer, provide 50 micron and 0.5 micron waste water filters in line to drain or waste water storage. Change filters as necessary. Locate filters inside shower unit so that water lost during filter changes is caught by shower pan.
 - h. Provide Hose Bib.
 - i. Provide all other items indicated on contract drawings.
3. Equipment Room (contaminated area): Work equipment, footwear and additional contaminated work clothing to be removed and packaged for disposal here. Separate this room from the work area by three, 6-mil polyethylene flap doorways. Separate this room from the Shower Zone and Work Area with air tight walls fabricated of 6-mil polyethylene and plywood stud walls.
4. Work Area: Separate work area from the Decontamination Unit by three, 6-mil polyethylene flapped doorways.

B. Construction

1. Walls and Ceiling: Construct air tight walls and ceiling using two layers of polyethylene sheeting, at least 6-mil in thickness.
2. Floors: Use 2 layers of 6-mil polyethylene sheeting to cover floors in the Vacuum and Shower Zones, and Changing Room.
3. Doors: Fabricated from 3 overlapping sheets of 6-mil polyethylene with openings a minimum of three feet (3') wide. Configure so that sheeting overlaps adjacent surfaces by 12 inches minimum. Weight sheets at bottoms as required so that they quickly close after being released. Put arrows on sheets to indicate direction of overlap and/or travel. Provide a minimum of six feet (6') between entrance and exit of any room.
4. Visual Barrier: Where the decontamination area is immediately adjacent to and within view of occupied areas, provide a visual barrier or opaque polyethylene sheeting at least 6-mil in thickness so that worker privacy is maintained and work procedures are not visible to building occupants.

C. Decontamination Sequence-Personnel

1. Entering Work Area

Worker enters Changing Room and removes street clothing, puts on clean disposable overalls and respirator, and passes through the Shower Room, the Equipment Room, and into the Work Area in a full containment.

2. Exiting Work Area

Before leaving the full-containment work area, require the worker to remove all gross contamination and debris from overalls and feet. The worker then proceeds to the Equipment Room and removes all clothing except respiratory protection equipment. Extra work clothing may be stored in contaminated end of the Equipment Room. Disposable coveralls are placed in a bag for disposal with other contaminated material. Vacuum debris from face, body, respirator and hair. Proceed to Shower Zone. Take a full body shower. Decontamination procedures found in Section 0175, Worker Protection, shall be followed by all individuals leaving the work area.

3. When a limited-containment enclosure is being exited, workers will remove all gross debris from overalls and feet. The worker will remove all disposable protective clothing in the Work Area with the exception of the required respiratory protection. Place all disposable protective clothing with other contaminated material for disposal. Vacuum debris from face, body, respirator and hair and exit out of the Work Area and proceed directly to another Work Area or shower zone which may or may not be directly adjacent to Work Area. Take a full body shower.

D. Equipment Decontamination Units

Provide a separate Equipment Decontamination Unit consisting of a serial arrangement of Clean Room, Holding Room, Wet Cleaning Room, and Equipment Room for removal of equipment and material from work area.

1. Equipment Decontamination Unit: The Equipment Decontamination Unit will be constructed in the same manner as the Personnel Decontamination unit.
2. Wet Cleaning Room: The Wet Cleaning Room will be used for final cleaning and packaging of contaminated materials and equipment exiting the Equipment Room.
3. Equipment Room: Used for removal of gross contamination from equipment and materials exiting the work area.

E. Decontamination Sequence-Equipment

All equipment, containers, or material leaving a full-containment work area must be passed through the Equipment Decontamination Unit according to the following procedure:

1. Before passing equipment, containers or bagged ACM debris into the Equipment Room, remove gross contamination in the Work Area.

2. Once inside the Equipment Room, wet-clean and HEPA vacuum the ACM containing bags or containers and place in a clean second labeled bag (double bag). Equipment and supplies from the Work Area entering the Equipment Room will be wet wiped and HEPA vacuumed to remove contamination.
3. Double-bagged ACM debris and/or cleaned equipment may pass in the Wet Cleaning Room.
4. In the Wet Cleaning Room, wet wipe outside of bags or containers and equipment with damp clean rag to remove any remaining contamination.
5. Require workers performing equipment decontamination procedures to wear full protective clothing, wearing appropriate respiratory protection and exit the work area through the Personnel Decontamination sequence.

F. Decontamination of Limited-Containment Materials without Adjacent Equipment Decontamination Unit

For limited containment work areas, all materials inside Work Area directly or indirectly used in the removal or disposal of asbestos will be double-bagged for disposal, the bags will be wiped down with wet rags from fresh, clean water and the bags will be vacuumed of all debris. The bags will be carefully removed from the limited containment and taken to an equipment decontamination unit (Section D). All decontamination sequence-equipment procedures in Section E will be followed once equipment or material are in the decontamination unit.

G. Cleaning of Decontamination Units

Clean debris and residue from inside of Decontamination Units on a daily basis. Damp wipe or hose down all surfaces after each shift change. Clean debris from shower pans on a daily basis.

H. Signs

Post an approximately 20"x14" manufactured caution sign at each entrance to the work area displaying the following legend with letter sizes and styles of a visibility required by 29 CFR 1926:

**DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED
IN THIS AREA**

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0190 – PROJECT DECONTAMINATION

PART 1 – GENERAL

1.1 GENERAL

A. DESCRIPTION OF WORK

Decontamination of the Work Area

1. The work consists of cleaning of the work barrier plastic, cleaning of the room surfaces to remove any contamination, and trace fiber fixation of all surfaces.
 2. When in a limited-containment enclosure, the amount of equipment, furniture, material and surface cleaning will depend upon debris visible and condition of material before start of abatement. Where there is visible debris present and/or poor material condition, a surface cleaning will be mandatory. Visible debris and material condition has been evaluated and is specified in site work.
- B.** Operation of the negative pressure system is to continue through the Project Decontamination phase to remove airborne fibers generate by the work.
- C.** Work Area Clearance: Air testing and other requirements which must be met before release of Contractor and reoccupancy of the work area are specified in Section 0135 and 0195.

1.2 EXECUTION

A. General

Work of this section includes the decontamination of surfaces and air in the Work Area which have been, or may have been, contaminated by elevated airborne asbestos fiber levels generated during abatement activities.

B. First Cleaning

1. First Cleaning: After removal of all asbestos materials, asbestos-contaminated materials and debris from the work area and receiving authorization from the Consultant carry out a cleaning of all surfaces of the work area including remaining sheeting, tools, and scaffolding by use of damp-cleaning and mopping, and/or a High Efficiency Particulate Absolute (HEPA) filtered vacuum. Do not perform dry dusting or dry sweeping. Continue this cleaning until there is no visible debris from removed materials or residue on plastic sheeting or other surfaces.
2. Perform a complete visual inspection of the entire work area including: decontamination unit, all plastic sheeting, seals over ventilation openings, doorways, windows, and other openings; look for debris from any sources, residue on surfaces, dust or other matter. If any such debris, residue, dust or other matter is found, repeat cleaning procedures and continue

decontamination procedure. When the area is visually clean, complete the certification at the end of this section. If visual inspection reveals areas that are not sufficiently clean, the Consultant will prepare a "punch list" of tasks that need to be completed. Visual inspection is not complete until confirmed in writing by the Consultant.

3. Encapsulation: After receiving authorization from Consultant to perform trace fiber fixation of surfaces at this time. Maintain negative air system in operation during encapsulation work.

Following the application of trace fiber fixation material and receiving approval of Consultant, remove all working barrier sheeting and equipment decontamination unit, leaving only:

- a. Critical Barrier: which forms the sole barrier between the work area and other portions of the building or the outside.
- b. Critical Barrier Sheeting: over lighting fixtures and clocks, ventilation openings, doorways, convectors, speakers and other openings.
- c. Decontamination unit: for personnel in operating condition.
- d. Negative Pressure System: maintain in continuous operation.

C. Air Sampling

1. Phase Contrast Microscopy (PCM) for the ACM removal in work area: After the work area is found to be visually clean, PCM clearance samples will be taken and analyzed in accordance with procedures for PCM analysis.
 - a. If the results of all PCM clearance samples are less than .010 fibers / cubic centimeter, the Contractor can then proceed with work area clearance procedures specified in Section 0195.

D. Completion of Abatement Work

Asbestos abatement work is complete upon meeting the PCM work area clearance criteria specified in Section 0195.

1. Remove equipment, materials from the work area.
2. Dispose of all asbestos containing waste material as specified in Section 2030.
3. The contractor shall leave critical barriers in-place that form the sole barrier between the work area and other portions of the building. These barriers are to separate the floor that has passed clearance asbestos and lead testing from the remaining floors to provide the general contractor a separate working environment during the reconstruction that can be monitored as a separate workspace.

If the abatement area does not pass the PCM work area clearance criteria, repeat cleaning procedures. The Contractor may take the PCM clearance samples that are above the clearance criteria and have them analyzed by Transmission Electron Microscopy (TEM) at the Contractor's expense. The clearance criteria for TEM samples shall be 70 structures / square millimeter. All TEM samples shall pass these clearance criteria.

E. Certificate of Visual Inspection

Following this section is a "Certificate of Visual Inspection." This certification is to be completed by the Contractor and certified by the Consultant.

CERTIFICATION OF VISUAL INSPECTION

In accordance with Section 0190, Project Decontamination, the Contractor hereby certifies that he has visually inspected the work area (all surfaces including pipes, beams, ledges, walls, ceiling and floor, Decontamination Unit, sheet plastic, etc.) and has found no dust, debris or residue.

By: _____
Signature _____ Date _____

Print Name

Print Title

Consultant

The Consultant hereby certifies that he has accompanied the Contractor on his visual inspection and verifies that this inspection has been thorough and to the best of his knowledge and belief, the Contractor's certification above is a true and honest one.

By: _____
Signature _____ Date _____

Print Name

Print Title

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0195 – WORK AREA CLEARANCE CRITERIA

PART 1 – GENERAL

1.1 GENERAL

A. CONTRACTOR RELEASE CRITERIA

The work is completed when the work area is visually clean and airborne fiber concentrations are less than .010 fibers / cubic centimeter.

1.2 AGGRESSIVE SAMPLING

- A. Before sampling pumps are started, the exhaust from a leaf-blower (with an approximate 1-horsepower electric motor) will be swept against all walls, ceilings, floors, ledges and other surfaces in the room. All final clearance samples shall be collected under dry conditions using aggressive techniques. Aggressive techniques should be conducted in accordance with Appendix M of the 1985 United States Environmental Protection Agency document "*Guidance for Controlling Asbestos-Containing Materials in Buildings*" (the Purple Book). All barriers, except critical barriers, shall be removed for final clearance, unless the abatement area is not isolated from adjacent areas, or aggressive techniques are likely to contaminate adjacent areas.

1.3 AIR SAMPLING

A. Phase Contrast Microscopy (PCM)

A minimum of five clearance samples shall be collected for each area clearance when the activities involve gross abatement of friable materials. For gross abatement areas greater than 5,000 square feet or 50,000 cubic feet, an additional sample is required for each additional 2,500 square feet or 25,000 cubic feet, whichever is more stringent (e.g., an enclosure of 10,000 square feet or 100,000 cubic feet would require 7 clearance samples).

For abatement activities involving limited quantities of friable materials (such as glove bag removal) or abatement of non-friable materials a minimum of two in-progress final air samples shall be collected.

- B. **Release Criteria:** Decontamination of the work site is completed when all air samples are less than 0.010 fiber / cubic centimeters.

If the abatement area does not pass the PCM work area clearance criteria, repeat cleaning procedures. The Contractor may take the PCM clearance samples that are above the clearance criteria and have then analyzed by Transmission Electron Microscopy (TEM) at the Contractor's expense. The clearance criteria for TEM samples shall be 70 structures / square millimeter. All TEM samples shall pass these clearance criteria.

If release criteria are met, remove the critical barriers separating the work area from the rest of the building and shut down negative pressure system (when necessary). Air filtration

device intakes are to be completely sealed with 6-mil poly before moving to prevent discharge of embedded fibers.

For glovebagging methods per Section 0160 or outdoor removal per section 0164: a minimum of two "in-progress" area samples shall be collected from the immediate work area. The work area shall pass a visual inspection. The clearance criteria shall be less than 0.010 fibers/cubic centimeter.

1.4 LABORATORY TESTING

A. Phase Contract Microscopy (PCM)

The services of testing laboratory will be employed by the Owner to perform laboratory analysis of the daily air samples. A technician will be at the job site; samples will be sent daily so that verbal reports on air samples can be obtained by the morning of the third day following sample collection. A complete record certified by the testing laboratory, of all air monitoring tests and results will be furnished to the Owner, Consultant and the Contractor.

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 0200 – PROJECT CLOSEOUT

PART 1 – GENERAL

1.1 GENERAL

- A. Definitions:** Project closeout is the term used to describe certain collective project requirements, indicating completion of the Work, that are to be fulfilled near the end of the Contract time in preparation for final acceptance and occupancy by the Owner, as well as final payment to the Contractor and the normal termination of the Contract.
- B. Inspection Procedures:** Upon receipt of Contractor's request for inspection, the Consultant will either proceed with inspection or advise Contractor of unfulfilled prerequisites.
1. Following initial inspection, Consultant will either prepare the certificate of substantial completion, or will advise Contractor of work that must be performed before the certificate will be issued. The Consultant will repeat the inspection when requested and when assured that the Work has been substantially completed.
 2. Results of the completed inspection will form the initial "punch-list" of tasks needed to be completed for final acceptance.
- C. Reinspection Procedure:** The Consultant will reinspect the Work upon receipt of the Contractor's notice that the work, including the punch-list items resulting from earlier inspections, has been completed, except for those items whose completion has been delayed because of circumstances that are acceptable to the Consultant.
1. Upon completion of reinspection, the Consultant will either prepare a certificate of final acceptance, or will advise the Contractor of work that is incomplete or of obligations that have not been fulfilled, but are required for final acceptance.
 2. If necessary, the reinspection procedure will be repeated. A fee will be credited to the building owner to pay for the Consultant's services for each additional re-inspection.
- D. Record Specifications:** Maintain one complete copy of the Project Manual, including specifications and addenda, and one copy of other written construction documents such as change orders and similar modifications issued in printed form during construction. Mark these documents to show substantial variations in the actual work performed in comparison with the text of the specifications and modifications as issued.

Give particular attention to substitutions, selection of options and similar information on work where it is concealed or cannot otherwise be readily discerned at a later date by direct observation. Note related record drawing information and product data, where applicable. Upon completion of the work, submit record specifications to the Consultant.

- E. Record Product Data:** Maintain one copy of each product data submittal. Mark these documents to show significant variations in the actual Work performed in comparison with the submitted information. Include both variations in the products as delivered to the site, and variations from the manufacturer's instructions and recommendations for installation. Give particular attention to concealed products and portions of the work, which cannot otherwise be readily discerned at a later date by direct observation. Note related change orders and mark-up of record drawings and specifications. Upon Completion of mark-up, submit complete set of record product data to the Consultant.
- F. Record Sample Submittal:** Immediately prior to date or dates of substantial completion, the Contractor shall meet at the site with the Consultant and the owner's personnel, if desired, to determine which, if any, of the submitted samples that have been maintained by the Contractor during progress of the Work, are to be transmitted to the owner for record purposes. Comply with delivery to the Owner's sample storage space.
- G. Miscellaneous Record Submittals:** Refer to other sections of these specifications for requirements of miscellaneous recordkeeping and submittals in connection with the actual performance of the Work. Immediately prior to the date or dates of substantial completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the Consultant for the owner's records.
- H. Post Notifications:** Prepare and transmit necessary post-project notifications to regulatory agencies.
- I. Project Closeout Documentation:** The Contractor shall provide copies of asbestos manifests, miscellaneous hazardous waste and UST removal bills of lading and manifests, results of any characterization analyses, all terminated bills of lading and manifests, weigh tickets, certificates of recycling, certificates of destruction, CFC's reclamation documentation, CFC's used refrigerated agreement from cylinder disposal facility, daily logs, containment sign-in sheets, asbestos certifications/medical/fit test of all workers, HAZMAT worker certifications, OSHA air sampling results, copies of all revisions to notifications, post notification and daily sign-in sheets. The closeout documentation shall be provided to the owner's representative as soon as possible after the completion of the environmental work.

1.2 EXECUTION - CLEANING

- A.** Provide post clearance cleaning of the Work after written approval of satisfactory completion. Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit of work to the condition expected from a normal, commercial building cleaning and maintenance program. Comply with the manufacturer's instructions for operations.
 - 1. Complete the following cleaning operations before requesting the Consultant's inspection for certification of substantial completion.
 - 2. Remove exposed labels in finished spaces which are not required as permanent labels on materials supplied as part of the work, except for "Asbestos," or "Asbestos Free".
 - 3. Clean exposed hard-surfaced finishes affected by the work, to a dirt-free

condition, free of dust, stains, films and similar distracting substances. Except as otherwise indicated, avoid disturbance of natural weathering of exterior surfaces. Restore reflective surfaces to original reflective condition.

4. Clean project site (yard and grounds), including landscaped areas, of litter and foreign substances left during the course of the work. Sweep paved areas that have been affected by the work to a broom-clean condition; remove stains, petrochemical spills and other foreign deposits left by the work. Rake grounds which are neither planted nor paved, to a smooth, even-textured surface where they have been disturbed by the work.
- B. Removal of Protection:** Except as otherwise indicated or requested by the Consultant, remove temporary protection devices and facilities which were installed during the course of the work to protect previously completed work during the remainder of the construction period.
 - C. Repair/Replacement of Damaged Materials:** Repair or replace any damaged materials, surfaces, equipment, insulation, finishes or other items.
 - D. Compliance:** Comply with safety standards and governing regulations for cleaning operations. Do not burn waste materials at the site. Do not bury debris or excess materials on the owner's property unless specific written approval is granted by owner or Consultant. Do not discharge volatile or other harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner.
 - E.** Where extra materials of value remaining after completion of associated work have become the owner's property, dispose of these to the owner's best advantage as directed.

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

DIVISION 2 - SITE WORK

SECTION 2005– COMMENCEMENT OF WORK

PART 1 – GENERAL

1.1 COMMENCEMENT OF WORK

The Contractor shall not commence work unless the following requirements have been met. These requirements must be met each time abatement work is to begin in a new work area.

A. Enclosure Systems

The specified enclosure systems have been constructed, tested and approved.

B. Ventilation Systems

The specified ventilation systems are functioning adequately and have been periodically tested using smoke detection method for one (1) hour (see Section 0145).

C. Submissions

All pre-abatement submissions, notifications, posting and permits have been provided and are satisfactory to the Consultant.

D. Equipment

All equipment for abatement, cleanup and disposal are on hand.

E. Training

All worker training (and certification) is completed.

F. Written Permission

Contractor received written permission from the consultant.

**FORMER ATCOM FACILITY
ENVIRONMENTAL SPECIFICATIONS**

SECTION 2010 – DIFFERING SITE CONDITIONS

PART 1 – GENERAL

1.1 DESCRIPTION

Amounts and locations of ACM has been field surveyed to confirm its presence. The Contractor is responsible to field verify locations, amounts and conditions. Linear and square footage and number of fittings are approximations based on the field survey.

FORMER ATCOM FACILITY ENVIRONMENTAL SPECIFICATIONS

SECTION 2030 – ASBESTOS WASTE HANDLING

PART 1 – GENERAL

1.1 ASBESTOS PACKAGING AND STORAGE

Asbestos waste shall be double-bagged in 6-mil asbestos-labeled polyethylene bags and individually sealed airtight with duct tape. Materials which are likely to puncture 6-mil bags are to be packaged by other means to ensure seal integrity.

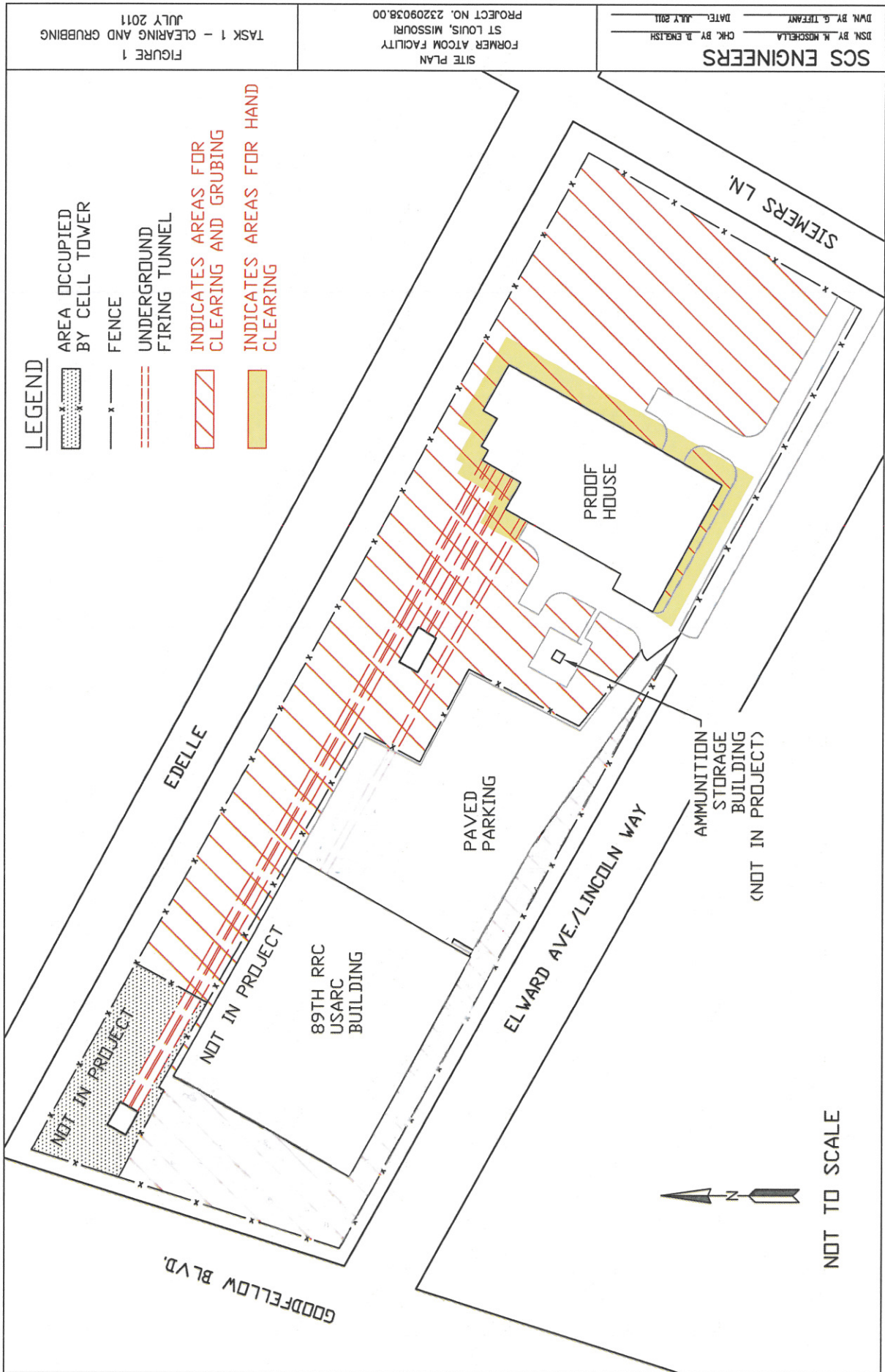
The contractor shall receive a completed Landfill Acceptance Letter (see Appendix III) from all receiving facilities, and provide the completed letters to the consultant prior to transporting any asbestos materials from the site.

- A.** Disposal material shall be HEPA-vacuumed and/or wet wiped in the work area to remove gross contamination before transporting to the decontamination area.
- B.** Disposal containers will then be decontaminated with a fine water spray and wet-wiped in the equipment decontamination area.
- C.** Containers which have been thoroughly cleaned will be passed through the air locks of the equipment decontamination area into the clean zone.
- D.** All ACM removed from the work area shall be properly bagged, labeled, and disposed as special waste in an approved landfill.
- E.** The Asbestos Abatement Contractor shall remove all containerized waste from the work area on a daily basis.
- F.** Disposal material shall not be stored outside the designated staging area. Bags from the work area shall be taken directly to an enclosed truck or dumpster. Bagged asbestos shall not be transported in open trucks. Damaged bags or bags containing sharp materials that will puncture the containment bag must be contained in rigid containers (i.e. fiber drums). Drums shall be labeled with the same warning as the bags. Uncontaminated drums may be reused. Drums that have been contaminated as asbestos-containing waste shall be disposed in accordance with this specification and applicable regulations.
- G.** At the burial site, sealed plastic bags shall be carefully removed from the truck in a manner to prevent rupturing the bags. Personnel involved in the unloading of ACM bags must wear personal protective gear including respiratory protection. ACM bags shall be covered with suitable material immediately after receipt in the landfill.
- H.** A copy of the completed waste manifest, chain of custody form and landfill receipt will be provided to the consultant by the Contractor as soon as they are available.

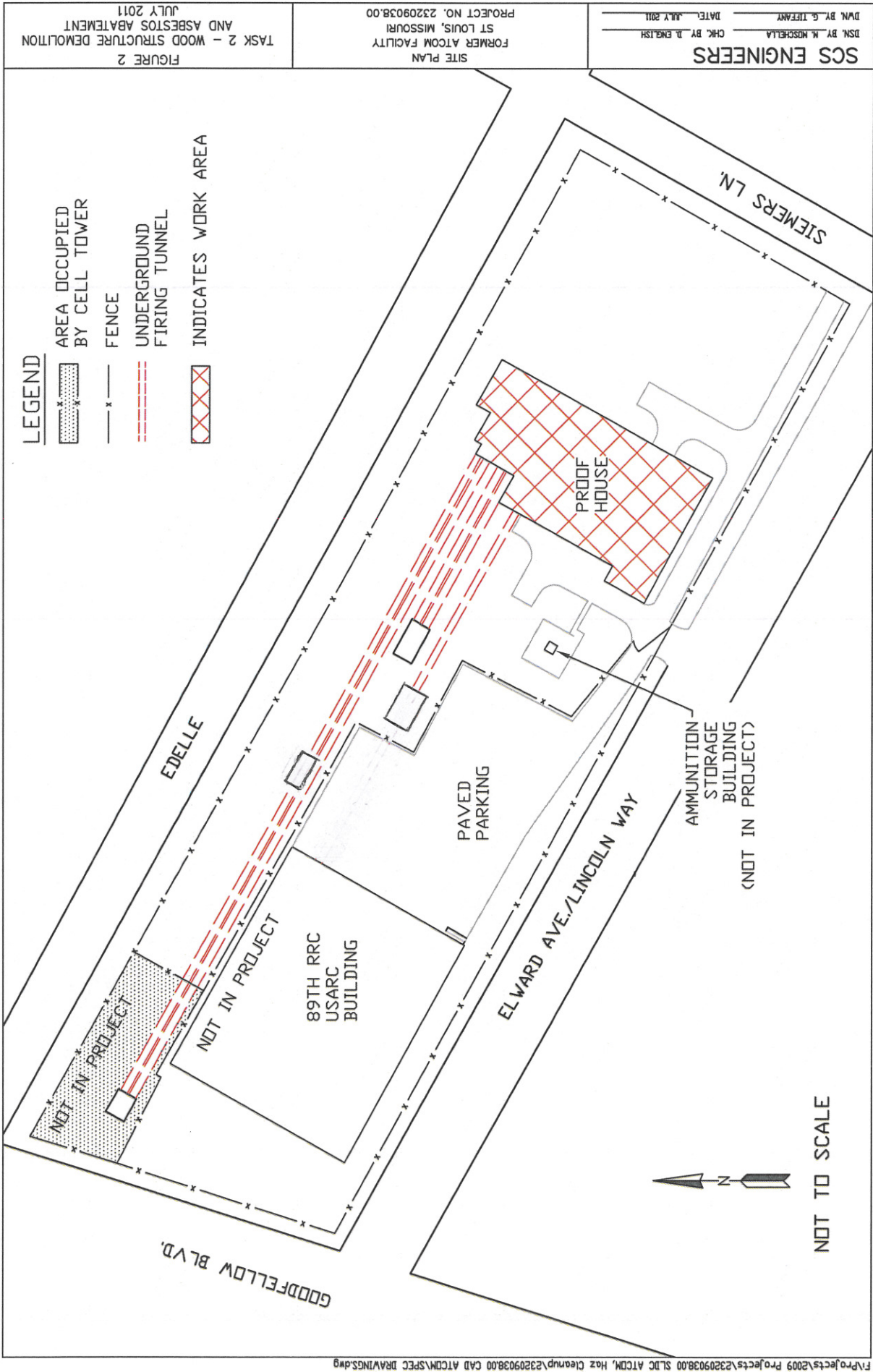
1.2 LABELING

- A.** All ACM disposal containers shall be labeled in accordance with OSHA and DOT requirements.

Appendix 1
Clearing and Grubbing
(Phase 1)

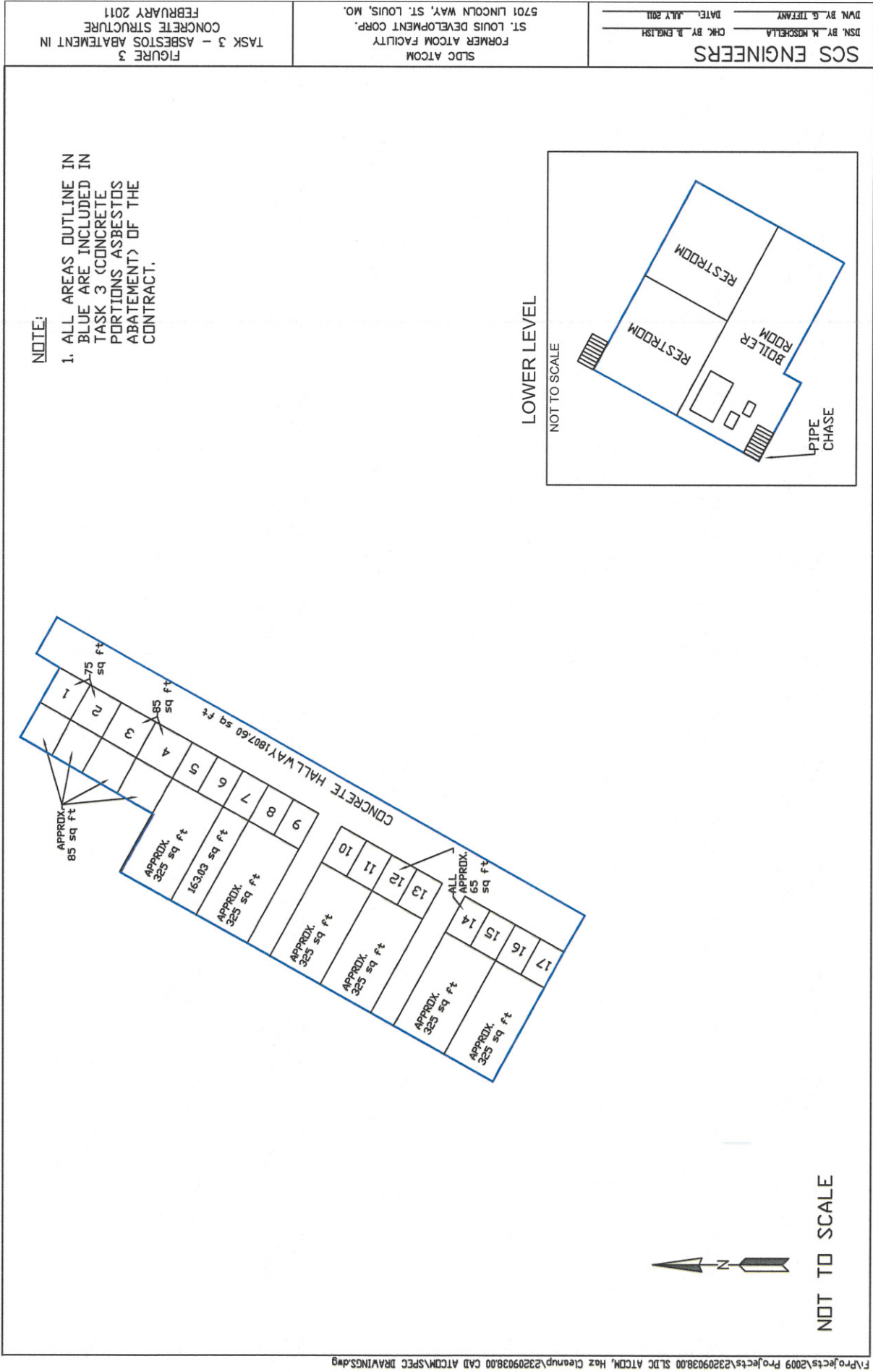


Appendix 2
Wood Structure Demolition & Asbestos Abatement
(Phase 2)

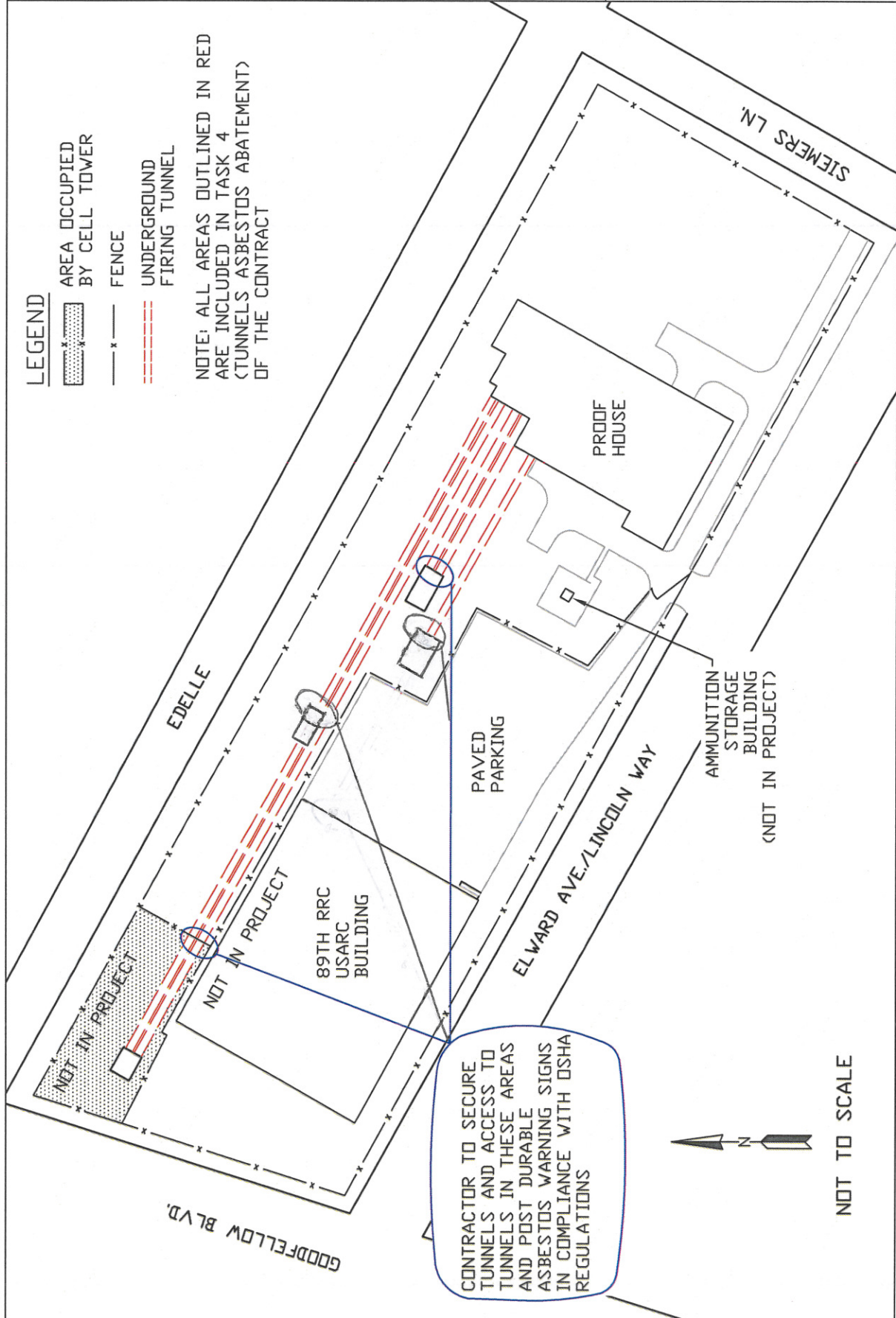




Appendix 3
Asbestos Abatement in Concrete Structure
(Phase 3)



Appendix 4
Asbestos Abatement in Tunnels
(Phase 4)



Appendix 5

Asbestos Inspection



Asbestos Survey
5701 Lincoln Way
Former Army Aviation and Troop
Command Facility (ATCOM)
St. Louis, Missouri

Presented to:

St. Louis Development
Corporation (SLDC)

1015 Locust Street, Suite 1200
St. Louis, MO 63101

Presented by:

SCS ENGINEERS

10975 El Monte, Suite 100
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January 2011
File No. 23209038.00

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Figure 1. Site Location Map

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1.0 INTRODUCTION

SCS Engineers (SCS) has been contracted by our client, the St. Louis Development Corporation (SLDC), to perform an Asbestos Inspection at the former Army Aviation and Troop Command Facility (ATCOM) located at 5701 Lincoln Way, Jackson County, St. Louis, Missouri (the “Subject Site”).

This report presents the results of the survey conducted at former ATCOM site. Unless otherwise noted, the survey was conducted as specified by the terms and conditions of the contract between SCS and the SDLC.

1.1 PURPOSE OF THE SURVEYS

The intent of the inspection is to identify and quantify asbestos containing building materials (ACBMs) so that these materials can be properly abated from the Site.

The Environmental Protection Agency’s (EPA’s) National Emission Standards for Hazardous Air Pollutants (NESHAPs) for asbestos, as found in 40C.F.R Part 61.145, requires the owner or operator to have a thorough asbestos inspection be completed by a certified inspector prior to any renovation or demolition of commercial or public structures. Regulations exist to protect the public from the potentially harmful effects of exposure to asbestos fibers during removal, renovation and demolition in commercial and public buildings.

This inspection was conducted with the intent to identify suspect ACBM throughout the building, sample the building materials for laboratory analysis to determine the asbestos content, and provide a detailed report. The survey is sufficient in scope and detail to provide documentation for abatement and demolition.

SLDC wishes to conduct cleanup on the property, and to ultimately obtain a “No Further Action” letter or Certificate of Completion from the Missouri Department of Natural Resources (MDNR) that demonstrates the Site is ready for non-residential development.

1.2 PROPERTY DESCRIPTION AND BACKGROUND

Prior to construction of the St. Louis Ordnance Plant (SLOP), in approximately 1941, the site previously contained single-family residences. Sanborn maps indicate that development of the single-family residences began prior to 1920. Residences were located at the site until construction of the underground firing range, also known as the ATCOM facility, was completed. The property contains approximately 3.5 acres of land which was utilized for small arms munitions (.30 and .50 caliber) testing during World War II. The site was transferred to private ownership in 1966, and remained in private ownership until the SLDC Land Reutilization Authority acquired the former ATCOM site through a tax foreclosure in 1997.

1.3 FACILITY DESCRIPTION

The site is located in a heavily wooded overgrown area. The Site consists of one building (the former proof house) constructed of a two-story wood frame building with partial basement connected to a concrete building containing 12 aboveground test firing stations and five above ground test firing rooms connected to underground firing range tunnels. Additionally, the Site consists of a small ammunition storage building within a cast-in-place concrete bunker. The main floor footprint of the former proof house covers approximately 19,100 square feet, and the former ammunition storage building contains approximately 100 square feet.

The firing tunnels and test firing stations are primarily intact. Original plan and as-built drawings were utilized to estimate firing tunnel lengths. The two northern most firing tunnels are approximately 580 feet in length. However, a cell tower was constructed on the northwest corner of the site in the early 1990s, and construction could have resulted in up to 100 feet of both firing tunnels being removed or filled. The two firing tunnels located immediately to the south of the northern most firing tunnels measure approximately 140 feet in length and extend from the former proof house to a relatively intact bullet trap and lead core handling area. The southernmost firing tunnel is approximately 490 feet in length, and extends from the former proof house onto property owned by the 89th Regional Readiness Command (RRC). Firing tunnel diameters range from approximately five feet, for the two northern most tunnels, to approximately seven feet, for the three southern most tunnels.

The buildings are in very poor condition, and roofs have begun to collapse into the interior of the buildings. The interior structure is in very poor condition. The majority of the interior walls and ceilings have decayed and large sections have fallen off. Much of the remaining interior materials including flooring, pipes, and duct work are in a similar state. A large quantity of miscellaneous debris is scattered and piled throughout the building.

1.4 PREVIOUS SURVEYS AND REPORTS

Brownfields Targeted Assessment (BTA) Report for Former ATCOM Parcel, St. Louis, Missouri prepared by Ecology and Environment, Inc. for the U.S. Environmental Protection Agency (EPA) Region 7 Superfund Division, September 7, 1999. The BTA report included a walk-through inspection, a historical review, a review of local, state, and federal agencies records, and interviews with persons knowledgeable about the site. Ecology and Environment, Inc. stated that the property consists of approximately 3.5 acres of land and contains a vacant one-story building in very poor condition. The building appears to have been used as a firing range for testing ammunition and has several underground tunnels. Limited sampling of building materials, paint, and surface and subsurface soil was completed. Analysis indicates that hazardous substances exist at the site. Hazardous substances identified at the site include asbestos, lead-base paint, and lead in subsurface soil.

A total of three building material samples were collected and analyzed for the presence of asbestos. A sample of sprayed-on insulation identified within the tunnels and test firing rooms was found to contain 60 percent Crocidolite, and a sample of pipe wrap found in a hallway was found to contain 5 percent Chrysotile and 5 percent Amosite. A total of six surface and ten subsurface soil samples were collected and analyzed for arsenic, barium, beryllium, cadmium,

chromium, lead, mercury, nickel, vanadium, volatile organic compounds (VOCs), and explosives. With the exception of lead identified in one subsurface soil sample, none of the metals exceeded the Missouri Soil Target Concentration (STARC) Scenario C (industrial land use) concentrations used for comparison. The concentration of lead identified in subsurface soil Sample 104 was 2,070 mg/kg, greater than the STARC Scenario C concentration of 660 mg/kg. Sample 104 was collected at a depth of 6 to 12 inches below ground surface (bgs) near the southeast corner of the site. Explosives or VOCs were not identified in the surface or subsurface soil samples collected. One paint chip sample was collected from the eastern hallway within the former proof house. Laboratory analysis indicates that the concentration of lead in the paint chip sample was 6,990 mg/kg. Based on the laboratory analytical data, the paint is considered to be lead-base (greater than 5,000 mg/kg lead); however, no federal or state clean-up levels have been established for this material. Ecology and Environment, Inc. recommended further sampling to delineate the extent of lead contamination on the property; a full asbestos inspection to estimate the quantity of asbestos containing material (ACM) present; and further inspection of the tunnels for lead and other contaminants associated with firing ranges.

Phase II Brownfields Environmental Site Assessment St. Louis Ordnance Plant Ex-Army Underground Firing Range Parcel ID #43500000910, St. Louis, Missouri prepared by the Missouri Department of Natural Resources (MDNR) dated July 7, 2005. The report states that contaminants of concern at the site include lead paint, asbestos, heavy metals, explosives, and pesticides. Six paint chip samples were collected, and laboratory analysis indicated that lead concentrations ranged from 11,500 mg/kg to 186,000 mg/kg. Asbestos was identified in six out of eight samples collected. Pipe wrap, transite siding, sprayed-on insulation, and floor tile were identified as ACM. Lead was identified in excess of STARC Scenario C at a concentration of 1,390 mg/kg in one subsurface sample collected from 8-12 feet bgs near a former bullet trap. Surface wipes collected within the firing tunnels identified elevated levels of metals (copper, iron, lead, magnesium, and zinc) on interior surfaces. Lead concentrations ranged from 110,000 ug/100 cm² to 26,000,000 ug/100 cm², well in excess of the highest allowable clearance criterion for lead dust within the confines of a building (Scenario C for window wells 800 ug/ft²). Explosives were not detected in wipe samples collected within the firing tunnels. One surface soil sample collected near the foundation of the former proof house contained chlordane at a concentration of 1,730 mg/kg, in excess of the STARC Scenario C limit of 30 mg/kg.

MDNR stated all interior painted surfaces can be assumed to contain high levels of lead. MDNR also stated that due to the poor condition of the structures, ACM is being exposed to the elements and should be considered as posing a threat of release to the environment and also a danger to human health of persons that enter the site. Soil surrounding the building foundations is anticipated to be impacted with high levels of chlordane, and subsurface soil near the former bullet trap is impacted with lead.

1.5 CONTENTS OF THE SURVEY REPORT

This Report consists of the following sections:

- Section 1.0, Introduction. This section presents the project purpose and background and the contents of the report.
- Section 2.0, Asbestos Survey Procedures. This section presents survey procedures, sample protocol, numbering, results and conclusions of the asbestos survey.
- Section 3.0, Conclusions and Recommendations. This section summarizes the investigation results and makes recommendations for further action.
- Appendix A, Estimated Quantities of ACM.
- Appendix B, Laboratory Data Reports.
- Appendix C, Inspector Certifications.

2.0 ASBESTOS SURVEY

SCS performed an asbestos inspection on the building at the former ATCOM site. The inspection involved a visual survey to identify and evaluate the condition of suspect asbestos containing materials (SACM), estimates of the extent and quantity of SACM, and sampling to confirm and characterize ACM.

The facility inspection was conducted in accordance with the contract requirements.

2.1 SURVEY PROCEDURES

SCS state-certified asbestos inspector performed the asbestos inspection in compliance with OSHA 29 CFR Part 1910. The inspection involved a visual survey to identify and evaluate the condition of suspect asbestos containing materials (SACM), estimates of the extent and quantity of SACM, and sampling to confirm and characterize ACM.

SACM was grouped into homogeneous material sets. Homogeneous materials are suspect building materials and areas that are uniform by color, texture, construction/application date and general appearance. SCS estimated quantities, condition, and friability of homogeneous materials in linear feet, square feet, or cubic feet on a per building basis.

2.2 SAMPLE PROTOCOL

Bulk material sampling was conducted for SACM identified in each building. The samples were at least one cubic centimeter and were placed in a sealed container at the time of collection. Two or three samples were collected for each homogenous material.

Appropriate precautions were taken to prevent exposure to those present in or around the Site during the collection of samples. Care was taken to prevent cross-contamination of the collected samples. Sample collection followed applicable federal and state requirements.

The bulk samples were sent to EMLab P&K located in San Bruno, California, a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory. There they were analyzed by polarized light microscopy (PLM) with dispersion staining, per EPA Method 600/R-93/116.

2.3 NUMBERING

SCS used a three-unit sampling identification number. The first unit indicates the building address where the sample was taken and the second set indicates the homogenous material group number for the building, and the last set indicates the sample number for that homogenous materials. The numbers are unique to all samples and are used as the designation on the chain of custody.

2.4 SURVEY RESULTS

The survey was conducted on November 17, 2009 and January 8, 2010. The laboratory data reports for the SACM samples collected are included in Appendix B. The primary asbestos concern appears to be two types of non-friable ACM. The summary of asbestos inspection findings is shown in the following table.

Table 1. Summary of Asbestos Survey

Location	Friable ACM Identified?	Non-friable ACM Identified?
Former ATCOM Site	Yes	Yes

Thirty-five unique building materials were identified during the survey and 69 samples were collected for analysis. The laboratory sample results are summarized in Table 2. Fifteen materials were determined to be greater than one percent ACM, including:

- 207-04-01 and 02: Tan interior window glazing
- 207-05-03: White non-fibrous material on plaster
- 207-07-01, 02, and 03: Pipe lagging
- 207-10-02: White compound on wallboard
- 207-13-01, 02, and 03: Black and green 9"x9" floor tile and mastic
- 207-17-01: White HVAC insulation
- 207-22-01: Boiler insulation
- 207-23-01: Heater exchange insulation
- 207-24-01: heater exchange insulation
- 207-25-01: White pipe lagging
- 207-26-01: Multicolored pipe lagging (cardboard material)
- 207-27-01, 02, and 03: Exterior transite
- 207-29-01: Roofing sealant
- 207-33-01, 02, and 03: Red 12"x12" floor tile and mastic
- 207-34-01, 02, and 03: Spray on insulation

Table 2. Asbestos Sample Results

Sample Number	Material Description	Asbestos Percent	Friable
207-01-01	Red non-fibrous material – anti static flooring	ND	No
207-01-02	Red non-fibrous material – anti static flooring	ND	
207-02-01	Brown fibrous wallboard material	ND	No
207-02-02	White compound with green paint, brown fibrous wallboard material	ND/ND	
207-03-01	Brown vapor barrier	ND	No
207-03-02	Brown vapor barrier	ND	
207-04-01	Tan interior window glazing	5% Chrysotile	No
207-04-02	Tan interior window glazing	5% Chrysotile	
207-05-01	Tan plaster	ND	No
207-05-02	Tan plaster	ND	
207-05-03	Brown paper, white non-fibrous material, tan plaster	ND/2% Chrysotile/2% Chrysotile	

Sample Number	Material Description	Asbestos Percent	Friable
207-06-01	Multi-colored semi-fibrous ceiling material	ND	No
207-06-02	White compound, multi-colored semi-fibrous ceiling material	ND/ND	
207-06-03	Multi-colored semi-fibrous ceiling material	ND	
207-07-01	White pipe wrap, white pipe insulation	ND/55%Amosite, 25% Chrysotile	Yes
207-07-02	White pipe wrap, white pipe insulation	ND/55%Amosite, 25% Chrysotile	
207-07-03	Beige wrap, white pipe insulation	ND/15%Amosite, 65% Chrysotile	
207-08-01	Black roofing material, black roofing tar	ND/ND	No
207-08-02	Black roofing material, black roofing tar	ND/ND	
207-08-03	Black roofing material, black roofing tar	ND/ND	
207-09-01	Brown roofing material	ND	No
207-09-02	Brown roofing material	ND	
207-09-03	Black non-fibrous material, brown roofing material	ND/ND	
207-10-01	Green paint, brown fibrous wallboard material	ND/ND	No
207-10-02	White compound with green paint, brown fibrous wallboard material	2% Chrysotile/ND	
207-11-01	Tan window glazing	ND	No
207-12-01	Green paint, multicolored drywall	ND/ND	No
207-12-02	Multicolored drywall	ND	
207-13-01	Black and green floor tile	10% Chrysotile	No
207-13-02	Black mastic, black and green floor tile	3% Chrysotile, 10% Chrysotile	
207-13-03	Black mastic, black and green floor tile	2% Chrysotile, 3% Chrysotile	
207-14-01	White non-fibrous material, red non-fibrous material – anti static floor	ND/ND	Yes
207-15-01	Cream non-fibrous material, red non-fibrous material – anti static floor	ND/ND	No
207-16-01	Multicolored ceiling tile	ND	No
207-16-02	Multicolored ceiling tile	ND	
207-16-03	Multicolored ceiling tile	ND	
207-17-01	White HVAC insulation, yellow HVAC insulation	80% Chrysotile/ND	Yes
207-17-02	Black fibrous material, brown HVAC insulation	ND/ND	
207-18-01	Black mastic, red floor tile	ND/ND	No
207-18-02	Black mastic, red floor tile	ND/ND	
207-19-01	Black mastic, black baseboard	ND/ND	No
207-20-01	Black mastic, black non-fibrous floor material	ND/ND	No
207-21-01	Black mastic, multicolored fibrous wallboard material	ND/ND	No
207-21-02	Black mastic, multicolored fibrous wallboard material	ND/ND	
207-21-03	Black mastic, multicolored fibrous wallboard material	ND/ND	
207-22-01	White insulation – boiler	50%Amosite, 35% Chrysotile	Yes
207-23-01	White insulation – heater exchange	75% Chrysotile	Yes
207-24-01	Peach wrap, white insulation – heater exchange	ND/45% Chrysotile, 30% Amosite	Yes
207-25-01	White pipe insulations – basement	55% Amosite, 30% Chrysotile	Yes
207-26-01	Multicolored pipe insulation – cardboard	75% Chrysotile	Yes
207-27-01	Light gray exterior transite	65% Chrysotile	No
207-27-02	Brown fibrous material, light gray exterior transite	ND/ 45% Chrysotile	
207-27-03	Light gray exterior transite	65% Chrysotile	
207-28-01	Black roofing shingle	ND	No
207-29-01	Black/gray roofing sealant	8% Chrysotile	No
207-30-01	Multicolored fibrous acoustic tile material – double layer	ND	No
207-31-01	Brown fibrous acoustic tile material	ND	No
207-31-02	Brown fibrous acoustic tile material	ND	

Sample Number	Material Description	Asbestos Percent	Friable
207-31-03	Brown fibrous acoustic tile material	ND	
207-32-01	Black non-fibrous material, brown paper	ND/ND	Yes
207-32-02	Black non-fibrous material, brown paper	ND/ND	
207-32-03	Black non-fibrous material, brown paper	ND/ND	
207-33-01	Red floor tile with black mastic	3% Chrysotile	No
207-33-02	Red floor tile with black mastic	3% Chrysotile	
207-33-03	Black mastic, red floor tile	3% Chrysotile/3% Chrysotile	
207-34-01	Gray spray on insulation	55% Crocidolite, 35% Chrysotile	Yes
207-34-02	Gray spray on insulation	55% Crocidolite, 35% Chrysotile	
207-34-03	Gray spray on insulation	55% Crocidolite, 35% Chrysotile	
207-35-01	Silver non-fibrous metal awning material	ND	No

Notes: ND Not detected.

2.5 COMMENTS

This section addresses specific ACMs identified in the building. Comments include a basic description of the material, the typical location or application use of the ACM, and an estimated quantity of ACM present.

207-04-01 and 02 Tan interior window glazing (Photos 1 and 2): This material was sampled in room 207A and the penthouse. It is assumed this glazing is on the interior panes of all exterior windows throughout the building. The material was identified as non-friable and in poor condition. There are approximately 2,500 linear feet of the asbestos containing window glazing present.

207-05-03 White non-fibrous material and Tan plaster (Photo 3): This material was sampled in room 207M. Samples were also collected from rooms 207A and 207J; however these samples did not contain asbestos. Based on the inability to visually delineate asbestos from non-asbestos plaster, it is assumed that all plaster throughout the building is asbestos containing. The material was identified as friable and in poor condition. There are approximately 13,500 square feet of plaster present.

207-07-01, 02, and 03 Pipe lagging (Photos 4, 5, and 6): This material was sampled in 207D, the East and West Hallway, and the North and South Hallway; **207-25-01 White pipe lagging (Photo 15):** This material was sampled from pipes located in the basement; **207-26-01 Multicolored pipe lagging (Photo 16):** This material was sampled from pipes located in the basement. These materials were identified as friable in very poor condition. There are approximately 1,500 linear feet of asbestos containing pipe lagging present.

207-10-02 White compound on wallboard (Photo 7): This material was sampled at the east end of the east and west hallway. A second sample was also collected from the west end of the hallway; however the sample did include the white compound and did not contain asbestos. It is assumed all of this wallboard contains the white compound and is asbestos containing. The material was identified as non-friable and in poor condition. There are approximately 800 square feet of asbestos containing wallboard present.

207-13-01, 02, and 03 Black and green 9"x9" floor tile and mastic (Photos 8, 9, and 10):

This material was sampled in rooms 207I, 207K, and 207L; **207-33-01, 02, and 03 Red 12"x12" floor tile and mastic (Photo 21, 22, and 23):** This material was sampled in room 207R and at the north and south ends of the hallway in the concrete portion of the building. These materials were identified as non-friable and in very poor condition. There are approximately 7,050 square feet of asbestos containing floor tile and mastic present.

207-17-01 White HVAC insulation (Photo 11): This material was sampled in room 207K on the HVAC system; **207-22-01 Boiler insulation (Photo 12):** This material was sampled from the boiler located in the basement; **207-23-01 Heater exchange insulation (Photo 13):** This material was sampled from a heater exchange located in the basement; **207-24-01 Heater exchange insulation (Photo 14):** This material was sampled from a second heater exchange located in the basement. These materials were identified as friable and in very poor condition. There are approximately 400 square feet of asbestos containing thermal insulation present.

207-27-01, 02, and 03 Exterior transite (Photo 17, 18, and 19): This material was sampled from the exterior wall of the penthouse, the exterior west side, and the exterior south side of the building. The material was identified as non-friable and in moderate condition. There are approximately 6,500 square feet of asbestos containing transite siding present.

207-29-01 Roofing sealant (Photo 20): This material was sampled on the roof of the building. The material was identified as non-friable and in moderate condition. There are approximately 1,000 linear feet of this material present.

207-34-01, 02, and 03 Spray on insulation (Photo 24, 25, and 26): This material was sampled from the tunnels in firing range #1 and #3, and from the wall in one of the test firing stations. The material was identified as friable and in good condition. There are approximately 31,500 square feet of asbestos containing spray on insulation present. This number includes 23,000 square feet in the tunnels and 8,500 in the test firing stations.

Fire Doors: Ten fire proof doors were observed throughout the building. Fire doors are considered suspect ACM. Fire doors were often made using asbestos in the core of the door. The appearance or age of a fire door does not indicate whether the door contains asbestos; therefore, the fire doors observed at the Subject Site are presumed to contain asbestos.

2.6 CONCLUSIONS

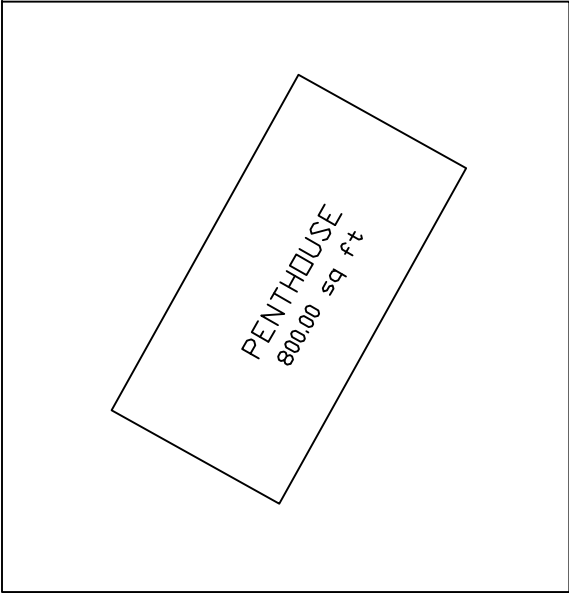
ACMs identified included window glazing, plaster, pipe lagging, wall board, floor tile and mastic, thermal system insulation, transite siding, roofing sealant, and spray on insulation. Additionally, presumed to be ACM fire doors were observed. The risk potential for exposure to these ACMs is high based on the condition and the condemned state of the building.

3.0 RECOMMENDATIONS

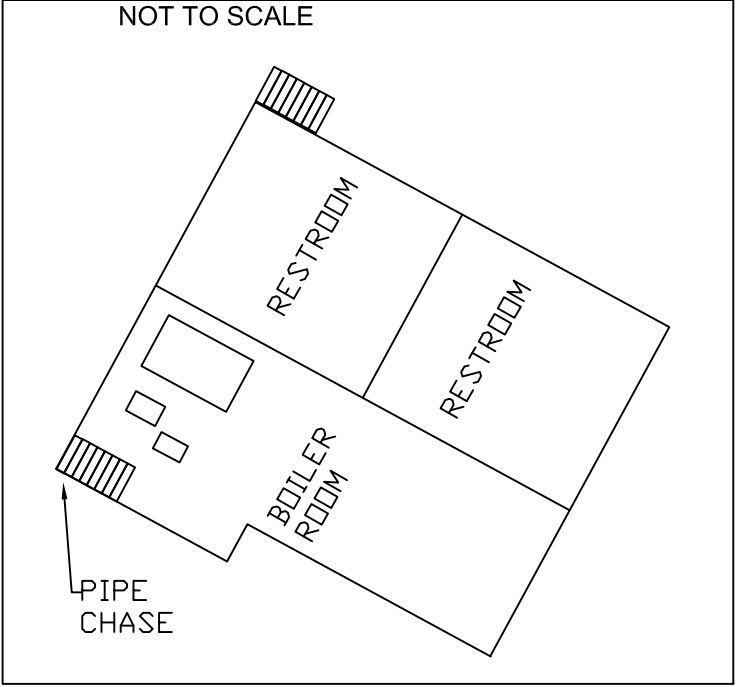
Safety concerns for physical abatement will be high based on the building condition. SLDC may want to consider performing a wet demolition on the wooden structure and disposing of all demolition debris as asbestos contaminated.

FIGURES

UPPER LEVEL



LOWER LEVEL



SCS ENGINEERS

DSN. BY D. BREVER CHK. BY D. BREVER
DWN. BY B. CLEMENTS DATE: JULY 2010

SLDC ATCOM
FORMER ATCOM FACILITY
ST. LOUIS DEVELOPMENT CORP.
5701 LINCOLN WAY, ST. LOUIS, MO.

FIGURE 1
BUILDING LAYOUT
JULY 2010

APPENDICES

Appendix A	Estimated Quantities of ACM
Appendix B	EMLab P&K Laboratory Data and Chain of Custody
Appendix C	Inspector Certification
Appendix D	Photo Album
Appendix E	Field Notes

APPENDIX A
ESTIMATED QUANTITIES OF ACM

**Estimated Quantities of ACM
Former ATCOM Site
St. Louis, Missouri**

Material	Estimated Quantities		Approximate locations
Window glazing	2,500	linear feet	Interior panes of exterior windows
Plaster	13,500	square feet	Sample from one of three was positive, all looked the same, assuming all plaster is positive
Pipe lagging	1,500	linear feet	throughout building and basement
Wall board	800	square feet	E-W hallway
Floor tile and mastic (9x9)	7,050	square feet	throughout building
Thermal System insulation	400	square feet	throughout building and basement
Transite siding	6,500	square feet	exterior of wood frame building
Roofing Sealant	1,000	linear feet	Roof
Spray on insulation	23,000	square feet	in tunnels
	8,500	square feet	in rooms
Fire doors	10	doors	throughout buildings
Debris on Floor	12,000	square feet	throughout wood building

APPENDIX B

SURVEY LABORATORY DATA REPORTS



EMLab P&K

Report for:

Ms. Gracie Shaver
SCS Engineers, Kansas
10975 El Monte Suite 100
Overland Park, KS 66211

Regarding: Project: SLDC Atcom; Asbestos Survey
 EML ID: 660504

Approved by:

Dates of Analysis:
Asbestos-EPA Method 600/R-93/116: 05-24-2010

Technical Manager
Nicole Hawthorne

Service SOPs: Asbestos-EPA Method 600/R-93/116 (EPA-600/M4-82-020 (SOP 100204))

For clarity, we report the number of significant digits as calculated; but, due to the nature of this type of biological data, the number of significant digits that is used for interpretation should generally be one or two. All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank corrections of results is not a standard practice. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Document Number: 200091 - Revision Number: 5

Client: SCS Engineers, Kansas
C/O: Ms. Gracie Shaver
Re: SLDC Atcom; Asbestos Survey

Date of Sampling: 05-18-2010
Date of Receipt: 05-20-2010
Date of Report: 05-24-2010

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Total Samples Submitted: 69

Total Samples Analysed: 69

Total Samples with Layer Asbestos Content > 1%: 26

Location: 207-01-01, Anti static floor - red & pink

Lab ID-Version‡: 2928787-1

Sample Layers	Asbestos Content
Red Non-Fibrous Material - Flooring Material	ND
Sample Composite Homogeneity: Good	

Location: 207-01-02, Anti static floor - red & pink

Lab ID-Version‡: 2928788-1

Sample Layers	Asbestos Content
Red Non-Fibrous Material - Flooring Material	ND
Sample Composite Homogeneity: Good	

Location: 207-02-01, Wallboard

Lab ID-Version‡: 2928789-1

Sample Layers	Asbestos Content
Brown Fibrous Material - Wallboard	ND
Composite Non-Asbestos Fibrous Content: 98% Cellulose	
Sample Composite Homogeneity: Good	

Location: 207-03-01, Vapor barrier

Lab ID-Version‡: 2928790-1

Sample Layers	Asbestos Content
Brown Vapor Barrier	ND
Composite Non-Asbestos Fibrous Content: 98% Cellulose	
Sample Composite Homogeneity: Good	

Location: 207-04-01, Window glazing

Lab ID-Version‡: 2928791-1

Sample Layers	Asbestos Content
Tan Window Glazing	5% Chrysotile
Sample Composite Homogeneity: Good	

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

All samples were received in acceptable condition unless otherwise noted. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: SCS Engineers, Kansas
 C/O: Ms. Gracie Shaver
 Re: SLDC Atcom; Asbestos Survey

Date of Sampling: 05-18-2010
 Date of Receipt: 05-20-2010
 Date of Report: 05-24-2010

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: 207-04-02, Window glazing**

Lab ID-Version‡: 2928792-1

Sample Layers	Asbestos Content
Tan Window Glazing	5% Chrysotile
Sample Composite Homogeneity:	Good

Location: 207-05-01, Plaster

Lab ID-Version‡: 2928793-1

Sample Layers	Asbestos Content
Tan Plaster	ND
Sample Composite Homogeneity:	Good

Location: 207-05-02, Plaster

Lab ID-Version‡: 2928794-1

Sample Layers	Asbestos Content
Tan Plaster	ND
Sample Composite Homogeneity:	Good

Location: 207-05-03, Plaster

Lab ID-Version‡: 2928795-1

Sample Layers	Asbestos Content
Brown Paper	ND
White Non-Fibrous Material	2% Chrysotile
Tan Plaster	2% Chrysotile
Composite Non-Asbestos Fibrous Content:	10% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-06-01, Ceiling board

Lab ID-Version‡: 2928796-1

Sample Layers	Asbestos Content
Multicolored Semi-Fibrous Material - Ceiling Board	ND
Composite Non-Asbestos Fibrous Content:	15% Cellulose
Sample Composite Homogeneity:	Good

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: SCS Engineers, Kansas
 C/O: Ms. Gracie Shaver
 Re: SLDC Atcom; Asbestos Survey

Date of Sampling: 05-18-2010
 Date of Receipt: 05-20-2010
 Date of Report: 05-24-2010

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: 207-06-02, Ceiling board**

Lab ID-Version‡: 2928797-1

Sample Layers	Asbestos Content
White Compound	ND
Multicolored Semi-Fibrous Material - Ceiling Board	ND
Composite Non-Asbestos Fibrous Content:	15% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-06-03, Ceiling board

Lab ID-Version‡: 2928798-1

Sample Layers	Asbestos Content
Multicolored Semi-Fibrous Material - Ceiling Board	ND
Composite Non-Asbestos Fibrous Content:	15% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-07-01, TSI - pipe lagging

Lab ID-Version‡: 2928799-1

Sample Layers	Asbestos Content
White Wrap	ND
White Pipe Insulation	55% Amosite 25% Chrysotile
Composite Non-Asbestos Fibrous Content:	10% Cotton
Sample Composite Homogeneity:	Good

Location: 207-07-02, TSI - pipe lagging

Lab ID-Version‡: 2928800-1

Sample Layers	Asbestos Content
White Wrap	ND
White Pipe Insulation	55% Amosite 25% Chrysotile
Composite Non-Asbestos Fibrous Content:	10% Cotton
Sample Composite Homogeneity:	Good

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

All samples were received in acceptable condition unless otherwise noted. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: SCS Engineers, Kansas
 C/O: Ms. Gracie Shaver
 Re: SLDC Atcom; Asbestos Survey

Date of Sampling: 05-18-2010
 Date of Receipt: 05-20-2010
 Date of Report: 05-24-2010

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: 207-07-03, TSI - pipe lagging**

Lab ID-Version‡: 2928801-1

Sample Layers	Asbestos Content
Beige Wrap	ND
White Pipe Insulation	65% Chrysotile 15% Amosite
Composite Non-Asbestos Fibrous Content:	10% Cotton
Sample Composite Homogeneity:	Good

Location: 207-08-01, Roof material - tar & rock

Lab ID-Version‡: 2928802-1

Sample Layers	Asbestos Content
Black Roofing Material	ND
Black Roofing Tar	ND
Composite Non-Asbestos Fibrous Content:	30% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-08-02, Roof material - tar & rock

Lab ID-Version‡: 2928803-1

Sample Layers	Asbestos Content
Black Roofing Material	ND
Black Roofing Tar	ND
Composite Non-Asbestos Fibrous Content:	30% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-08-03, Roof material - tar & rock

Lab ID-Version‡: 2928804-1

Sample Layers	Asbestos Content
Black Roofing Material	ND
Black Roofing Tar	ND
Composite Non-Asbestos Fibrous Content:	30% Cellulose
Sample Composite Homogeneity:	Good

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

All samples were received in acceptable condition unless otherwise noted. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: SCS Engineers, Kansas
C/O: Ms. Gracie Shaver
Re: SLDC Atcom; Asbestos Survey

Date of Sampling: 05-18-2010
Date of Receipt: 05-20-2010
Date of Report: 05-24-2010

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: 207-09-01, Roof material - board**

Lab ID-Version‡: 2928805-1

Sample Layers	Asbestos Content
Brown Roofing Material	ND
Composite Non-Asbestos Fibrous Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-09-02, Roof material - board

Lab ID-Version‡: 2928806-1

Sample Layers	Asbestos Content
Brown Roofing Material	ND
Composite Non-Asbestos Fibrous Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-09-03, Roof material - board

Lab ID-Version‡: 2928807-1

Sample Layers	Asbestos Content
Black Non-Fibrous Material	ND
Brown Roofing Material	ND
Composite Non-Asbestos Fibrous Content:	85% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-10-01, Wallboard

Lab ID-Version‡: 2928808-1

Sample Layers	Asbestos Content
Green Paint	ND
Brown Fibrous Material - Wallboard	ND
Composite Non-Asbestos Fibrous Content:	90% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-10-02, Wallboard

Lab ID-Version‡: 2928809-1

Sample Layers	Asbestos Content
White Compound with Green Paint	2% Chrysotile
Brown Fibrous Material - Wallboard	ND
Composite Non-Asbestos Fibrous Content:	85% Cellulose
Sample Composite Homogeneity:	Good

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

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Client: SCS Engineers, Kansas
C/O: Ms. Gracie Shaver
Re: SLDC Atcom; Asbestos SurveyDate of Sampling: 05-18-2010
Date of Receipt: 05-20-2010
Date of Report: 05-24-2010**ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116****Location: 207-11-01, Window glazing - smaller**

Lab ID-Version‡: 2928810-1

Sample Layers	Asbestos Content
Tan Window Glazing	ND
Sample Composite Homogeneity:	Good

Location: 207-12-01, Drywall

Lab ID-Version‡: 2928811-1

Sample Layers	Asbestos Content
Green Paint	ND
Multicolored Drywall	ND
Composite Non-Asbestos Fibrous Content:	15% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-13-01, Floortile 9x9 - black & green

Lab ID-Version‡: 2928812-1

Sample Layers	Asbestos Content
Black Floor Tile	10% Chrysotile
Sample Composite Homogeneity:	Good

Location: 207-13-02, Floortile 9x9 - black & green

Lab ID-Version‡: 2928813-1

Sample Layers	Asbestos Content
Black Mastic	3% Chrysotile
Black Floor Tile	10% Chrysotile
Sample Composite Homogeneity:	Good

Location: 207-03-02, Vapor barrier

Lab ID-Version‡: 2928814-1

Sample Layers	Asbestos Content
Brown Vapor Barrier	ND
Composite Non-Asbestos Fibrous Content:	98% Cellulose
Sample Composite Homogeneity:	Good

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Client: SCS Engineers, Kansas
 C/O: Ms. Gracie Shaver
 Re: SLDC Atcom; Asbestos Survey

Date of Sampling: 05-18-2010
 Date of Receipt: 05-20-2010
 Date of Report: 05-24-2010

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: 207-14-01, Anti static floor - red & white**

Lab ID-Version‡: 2928815-1

Sample Layers	Asbestos Content
White Non-Fibrous Material	ND
Red Non-Fibrous Material	ND
Sample Composite Homogeneity:	Good

Location: 207-15-01, Anti static floor - red & cream

Lab ID-Version‡: 2928816-1

Sample Layers	Asbestos Content
Cream Non-Fibrous Material	ND
Red Non-Fibrous Material	ND
Sample Composite Homogeneity:	Good

Location: 207-16-01, Ceiling tile 12x12

Lab ID-Version‡: 2928817-1

Sample Layers	Asbestos Content
Multicolored Ceiling Tile	ND
Composite Non-Asbestos Fibrous Content:	90% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-16-02, Ceiling tile 12x12

Lab ID-Version‡: 2928818-1

Sample Layers	Asbestos Content
Multicolored Ceiling Tile	ND
Composite Non-Asbestos Fibrous Content:	90% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-16-03, Ceiling tile 12x12

Lab ID-Version‡: 2928819-1

Sample Layers	Asbestos Content
Multicolored Ceiling Tile	ND
Composite Non-Asbestos Fibrous Content:	90% Cellulose
Sample Composite Homogeneity:	Good

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Client: SCS Engineers, Kansas
 C/O: Ms. Gracie Shaver
 Re: SLDC Atcom; Asbestos Survey

Date of Sampling: 05-18-2010
 Date of Receipt: 05-20-2010
 Date of Report: 05-24-2010

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: 207-17-01, HVAC insulation**

Lab ID-Version‡: 2928820-1

Sample Layers	Asbestos Content
White Insulation	80% Chrysotile
Yellow Insulation	ND
Composite Non-Asbestos Fibrous Content:	60% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 207-17-02, HVAC insulation

Lab ID-Version‡: 2928821-1

Sample Layers	Asbestos Content
Black Fibrous Material	ND
Brown Insulation	ND
Composite Non-Asbestos Fibrous Content:	80% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-18-01, Floortile 9x9 red

Lab ID-Version‡: 2928822-1

Sample Layers	Asbestos Content
Black Mastic	ND
Red Floor Tile	ND
Sample Composite Homogeneity:	Good

Location: 207-18-02, Floortile 9x9 red

Lab ID-Version‡: 2928823-1

Sample Layers	Asbestos Content
Black Mastic	ND
Red Floor Tile	ND
Sample Composite Homogeneity:	Good

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Client: SCS Engineers, Kansas
 C/O: Ms. Gracie Shaver
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Date of Sampling: 05-18-2010
 Date of Receipt: 05-20-2010
 Date of Report: 05-24-2010

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: 207-13-03, Floortile 9x9 - black & green**

Lab ID-Version‡: 2928824-1

Sample Layers	Asbestos Content
Black Mastic	2% Chrysotile
Green Floor Tile	3% Chrysotile
Sample Composite Homogeneity: Good	

Location: 207-19-01, Baseboard - black

Lab ID-Version‡: 2928825-1

Sample Layers	Asbestos Content
Black Mastic	ND
Black Baseboard	ND
Sample Composite Homogeneity: Good	

Location: 207-20-01, Black floor material

Lab ID-Version‡: 2928826-1

Sample Layers	Asbestos Content
Black Mastic	ND
Black Non-Fibrous Material - Floor Material	ND
Sample Composite Homogeneity: Good	

Location: 207-21-01, Wallboard & mastic

Lab ID-Version‡: 2928827-1

Sample Layers	Asbestos Content
Black Mastic	ND
Multicolored Fibrous Material - Wallboard	ND
Composite Non-Asbestos Fibrous Content:	85% Cellulose
Sample Composite Homogeneity: Good	

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 Date of Report: 05-24-2010

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: 207-21-02, Wallboard & mastic**

Lab ID-Version‡: 2928828-1

Sample Layers	Asbestos Content
Black Mastic	ND
Multicolored Fibrous Material - Wallboard	ND
Composite Non-Asbestos Fibrous Content:	85% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-21-03, Wallboard & mastic

Lab ID-Version‡: 2928829-1

Sample Layers	Asbestos Content
Black Mastic	ND
Multicolored Fibrous Material - Wallboard	ND
Composite Non-Asbestos Fibrous Content:	85% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-22-01, Thermal insulation - boiler

Lab ID-Version‡: 2928830-1

Sample Layers	Asbestos Content
White Insulation	50% Amosite 35% Chrysotile
Sample Composite Homogeneity:	Good

Location: 207-23-01, Thermal insulation - heater exchange

Lab ID-Version‡: 2928831-1

Sample Layers	Asbestos Content
White Insulation	75% Chrysotile
Sample Composite Homogeneity:	Good

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Date of Sampling: 05-18-2010
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 Date of Report: 05-24-2010

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: 207-24-01, Thermal insulation - heater exchange**

Lab ID-Version‡: 2928832-1

Sample Layers	Asbestos Content
Peach Wrap	ND
White Insulation	45% Chrysotile 30% Amosite
Composite Non-Asbestos Fibrous Content:	15% Cotton
Sample Composite Homogeneity:	Good

Location: 207-25-01, Pipe lagging

Lab ID-Version‡: 2928833-1

Sample Layers	Asbestos Content
White Pipe Insulation	55% Amosite 30% Chrysotile
Sample Composite Homogeneity:	Good

Location: 207-26-01, Pipe lagging - cardboard

Lab ID-Version‡: 2928834-1

Sample Layers	Asbestos Content
Multicolored Pipe Insulation	75% Chrysotile
Sample Composite Homogeneity:	Good

Location: 207-12-02, Drywall

Lab ID-Version‡: 2928835-1

Sample Layers	Asbestos Content
Multicolored Drywall	ND
Composite Non-Asbestos Fibrous Content:	15% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-27-01, Exterior transite

Lab ID-Version‡: 2928836-1

Sample Layers	Asbestos Content
Light Gray Transite	65% Chrysotile
Sample Composite Homogeneity:	Good

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Client: SCS Engineers, Kansas
 C/O: Ms. Gracie Shaver
 Re: SLDC Atcom; Asbestos Survey

Date of Sampling: 05-18-2010
 Date of Receipt: 05-20-2010
 Date of Report: 05-24-2010

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: 207-27-02, Exterior transite**

Lab ID-Version‡: 2928837-1

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Light Gray Transite	45% Chrysotile
Composite Non-Asbestos Fibrous Content:	10% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-27-03, Exterior transite

Lab ID-Version‡: 2928838-1

Sample Layers	Asbestos Content
Light Gray Transite	65% Chrysotile
Sample Composite Homogeneity:	Good

Location: 207-28-01, Roof material - shingle

Lab ID-Version‡: 2928839-1

Sample Layers	Asbestos Content
Black Roofing Shingle	ND
Composite Non-Asbestos Fibrous Content:	25% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-29-01, Gray roof sealant

Lab ID-Version‡: 2928840-1

Sample Layers	Asbestos Content
Black Sealant	8% Chrysotile
Sample Composite Homogeneity:	Good

Location: 207-30-01, Acoustic tile - double layer

Lab ID-Version‡: 2928841-1

Sample Layers	Asbestos Content
Multicolored Fibrous Material - Tile	ND
Composite Non-Asbestos Fibrous Content:	95% Cellulose
Sample Composite Homogeneity:	Good

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 Date of Receipt: 05-20-2010
 Date of Report: 05-24-2010

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: 207-31-01, Acoustic tile - 12x12 - thick**

Lab ID-Version‡: 2928842-1

Sample Layers	Asbestos Content
Brown Fibrous Material - Tile	ND
Composite Non-Asbestos Fibrous Content:	98% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-31-02, Acoustic tile - 12x12 - thick

Lab ID-Version‡: 2928843-1

Sample Layers	Asbestos Content
Brown Fibrous Material - Tile	ND
Composite Non-Asbestos Fibrous Content:	98% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-31-03, Acoustic tile - 12x12 - thick

Lab ID-Version‡: 2928844-1

Sample Layers	Asbestos Content
Brown Fibrous Material - Tile	ND
Composite Non-Asbestos Fibrous Content:	98% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-32-01, Paper behind acoustic tile

Lab ID-Version‡: 2928845-1

Sample Layers	Asbestos Content
Black Non-Fibrous Material	ND
Brown Paper	ND
Composite Non-Asbestos Fibrous Content:	60% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-32-02, Paper behind acoustic tile

Lab ID-Version‡: 2928846-1

Sample Layers	Asbestos Content
Black Non-Fibrous Material	ND
Brown Paper	ND
Composite Non-Asbestos Fibrous Content:	60% Cellulose
Sample Composite Homogeneity:	Good

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C/O: Ms. Gracie Shaver
Re: SLDC Atcom; Asbestos Survey

Date of Sampling: 05-18-2010
Date of Receipt: 05-20-2010
Date of Report: 05-24-2010

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: 207-32-03, Paper behind acoustic tile**

Lab ID-Version‡: 2928847-1

Sample Layers	Asbestos Content
Black Non-Fibrous Material	ND
Brown Paper	ND
Composite Non-Asbestos Fibrous Content:	60% Cellulose
Sample Composite Homogeneity:	Good

Location: 207-33-01, Floortile 12x12 - red

Lab ID-Version‡: 2928848-1

Sample Layers	Asbestos Content
Red Floor Tile with Black Mastic	3% Chrysotile
Sample Composite Homogeneity:	Good

Comments: Some layers in the sample were inseparable without cross contamination.**Location: 207-33-02, Floortile 12x12 - red**

Lab ID-Version‡: 2928849-1

Sample Layers	Asbestos Content
Red Floor Tile with Black Mastic	3% Chrysotile
Sample Composite Homogeneity:	Good

Comments: Some layers in the sample were inseparable without cross contamination.**Location: 207-33-03, Floortile 12x12 - red**

Lab ID-Version‡: 2928850-1

Sample Layers	Asbestos Content
Black Mastic	3% Chrysotile
Red Floor Tile	3% Chrysotile
Sample Composite Homogeneity:	Good

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 C/O: Ms. Gracie Shaver
 Re: SLDC Atcom; Asbestos Survey

Date of Sampling: 05-18-2010
 Date of Receipt: 05-20-2010
 Date of Report: 05-24-2010

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: 207-34-01, Spray on insulation**

Lab ID-Version‡: 2928851-1

Sample Layers	Asbestos Content
Gray Insulation	55% Crocidolite 35% Chrysotile
Sample Composite Homogeneity: Good	

Location: 207-34-02, Spray on insulation

Lab ID-Version‡: 2928852-1

Sample Layers	Asbestos Content
Gray Insulation	55% Crocidolite 35% Chrysotile
Sample Composite Homogeneity: Good	

Location: 207-34-03, Spray on insulation

Lab ID-Version‡: 2928853-1

Sample Layers	Asbestos Content
Gray Insulation	55% Crocidolite 35% Chrysotile
Sample Composite Homogeneity: Good	

Location: 207-02-02, Wallboard

Lab ID-Version‡: 2928854-1

Sample Layers	Asbestos Content
White Compound with Green Paint	ND
Brown Fibrous Material - Wallboard	ND
Composite Non-Asbestos Fibrous Content:	90% Cellulose
Sample Composite Homogeneity: Good	

Location: 207-35-01, Metal awning

Lab ID-Version‡: 2928855-1

Sample Layers	Asbestos Content
Silver Non-Fibrous Material - Metal	ND
Sample Composite Homogeneity: Good	

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 Chicago, IL: 1979 N. Mill St., #102, Naperville, IL 60563 • NVLAP #2007256-0
 Ft. Lauderdale, FL: 6301 NW 50 Way, #2050, Ft. Lauderdale, FL 33309 • NVLAP #200728-01; LELAP #04153
 Ft. Worth, TX: 14500 Trinity Blvd. #106, Ft. Worth, TX 76155 • NVLAP #200754-01; Texas DSHS #30-0365

CONTACT INFORMATION

Company: **SCS Engineers** Address: **10975 El Monte, Suite 100 Overland Park**
 Contact: **Gracie Shaver** Special Instructions: **KS 606211**
 Phone: **913-451-7510**

PROJECT INFORMATION

Project ID: **SLPC ATCOM**
 Project Desc: **Asbestos Survey**
 Project: **Sampling**
 Zip Code: **66201**
 Date & Time: **5/18/10**
 PO Number: **23209038.00**

TURN AROUND TIME CODES - (TAT)

STD - Standard (DEFAULT)
 ND - Next Business Day
 SD - Same Business Day Rush*
 * RUSHES AVAILABLE FROM LOCATIONS LISTED ABOVE
 Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

SAMPLE ID	DESCRIPTION	Sample Type (Below)	TAT (Above)	Total Volume (For Air Sample Only)	NOTES
207-01-01	Anti Static floor - Red + Pink	B	STD		
207-01-02	Anti Static floor - Red + Pink				
207-02-01	Wall board				
207-03-01	Vapor Barrier				
207-04-01	Windows glazing				
207-04-02	Windows glazing				
207-05-01	Plaster				
207-05-02	Plaster				
207-05-03	Plaster				
207-06-01	Ceiling board				
207-06-02	Ceiling board				
207-06-03	Ceiling board				

SAMPLE TYPE CODES	W - Wipe	T - Tape	R - Rock	O - Other
A - Air				
B - Bulk				
D - Dust				
SO - Soil				

RELINQUISHED BY: **Gracie Shaver**

DATE & TIME: **5/19/10 10:00**

RECEIVED BY: **Attendant**

DATE & TIME: **5/20/10 9am**

PCMI - Air	PCMI - Soil	FLM	Other Requests
Fiber Count (NIOSH 7400)	OSMA with TWA	NIOSH 9002 Method	Non-Asbestos Fiber Count (NIOSH 7400) - B* Counting Rules
EPA Method 600/R-93/116		EPA Point Count (200 Point Count)	EPA Screening Protocol Modified: Qualitative (Soil)
		EPA Point Count (400 Point Count)	EPA Screening Protocol Modified: Semi-Quantitative (Soil)
		EPA Point Count (1000 Point Count)	
		Gravimetric Point Count	
		Vermiculite Testing	
		C.A.R.B. 435 Method - Pre-crushed Sample	
		C.A.R.B. 435 Method - Regular Sample *TAT: 7 Business Days	

ASBE
 REQUIT
 000660504

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 Long Beach, CA: 4401 Atlantic Ave., #200, Long Beach, CA 90807 • NOLAP #200577-Q
 Chicago, IL: 1979 N. Mill St., #102, Naperville, IL 60563 • NOLAP #200756-Q
 Ft. Lauderdale, FL: 6201 NW 2nd Way, #2850, Ft. Lauderdale, FL 33309 • NOLAP #200738-QJ LELAP #04153
 Ft. Worth, TX: 14500 Trinity Blvd. #100, Ft. Worth, TX 76155 • NOLAP #200756-QJ TEXAS CDRS #30-0360

CONTACT INFORMATION

Company: SCS Engineers
 Contact: Gerrine Shaw
 Phone: 913-451-7520
 Address: 10975 El Monte, Suite 100 Overland Park, KS 66211
 Special Instructions:

PROJECT INFORMATION

Project ID: SLDC ATCOM
 Project Desc: Asbestos Survey
 Project: Sampling
 Zip Code: 66201
 Date & Time: 5/18/10
 PO Number:
 Turn Around Time Codes - (TAT)
 STD - Standard (Default)
 ND - Next Business Day
 SD - Same Business Day Rush*
 * RUSHES AVAILABLE FROM LOCATIONS LISTED ABOVE
 Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

SAMPLE ID	DESCRIPTION	Sample Type (Below)	TAT (Above)	Total Volume (For Air Sample Only)	NOTES
207-07-01	T51-Pipe lagging	B	STD		
207-07-02	T51-Pipe lagging				
207-07-03	T51-Pipe lagging				
207-08-01	Roof material - tar + Rock				
207-08-02	Roof material - tar + Rock				
207-08-03	Roof material - tar + Rock				
207-09-01	Roof material - board				
207-09-02	Roof material - board				
207-09-03	Roof material - board				
207-10-01	Wall board				
207-10-02	Wall board				
207-11-01	Window glazing - smaller				

SAMPLE TYPE CODES	W - Wipe	T - Tape	R - Rock	O - Other
A - Air				
B - Bulk				
D - Dust				
SO - Soil				

REUNQUISHED BY: J. Mui Sr.
 DATE & TIME: 5/19/10 10:00

RECEIVED BY: M. H. H. H.
 DATE & TIME: 5/20/10 9:00 AM

PCB - Air	OSHA with TWA	Fiber Count (NIOSH 7400)	NIOSH 5002 Method	EPA Point Count (200 Point Count)	EPA Point Count (400 Point Count)	EPA Point Count (1000 Point Count)	Gravimetric Point Count	Vermiculite Testing	C.A.R.B. 435 Method- Pre-crushed Sample	C.A.R.B. 435 Method- Regular Sample TAT: 7 Business Days	EPA Screening Protocol Modified: Qualitative (Soil)	EPA Screening Protocol Modified: Semi-Quantitative (Soil)	Non-Asbestos Fiber Count (NIOSH 7400)-"B" Counting Rules	Other Requests

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Chicago, IL: 979 N. LaSalle, #1002, Naperville, IL 60563 • NVLPAC #2107755-0
Ft. Lauderdale, FL: 3301 NW 5th Way, #2B50, Ft. Lauderdale, FL 33309 • NVLPAC #2107338-0; LEAP #04152
Ft. Worth, TX: 14500 Trinity Blvd., #106, Ft. Worth, TX 76155 • NVLPAC #210754-0; Texas DS165 #3

CONTACT INFORMATION

Company: SCS Engineers
Contact: Graeme Stewart
Phone: 913-451-7510
Address: 10475 E. Monte Vista, Overland Park
Special Instructions: KS 660241

PROJECT INFORMATION

Project ID: SLDC ATCOM

Project Desc: Asbestos Survey

Project	Sampling
Ship Code:	Date & Time:

Acquiring Data

TURN AROUND TIME CODES - (TAT)

STD - Standard (DEFAULT)

ND - Next Business Day


SD - Same Business Day Batch

+ FRANCHISES AVAILABLE IN HIGH LOCATIONS LISTED ABOVE

Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

SAMPLE ID	DESCRIPTION	Sample Type (Below)	TAT (Above)	Total Volume (For Air Sample Only)	NOTES
207-12-01	Drywall	B	STD		
207-13-01	Floor tile - 9x9 - Black + Green				
207-13-02	Floor tile - 9x9 - Black + Green				
207-03-02	Vapor Barrier				
207-14-01	Anti Static Floor - Red + White				
207-15-01	Anti Static Floor - Red + Cream				
207-16-01	Ceiling tile 12x12				
207-16-02	Ceiling tile 12x12				
207-16-03	Ceiling tile 12x12				
207-17-01	HVAC Insulation				
207-17-02	HVAC Insulation				
207-18-01	Floor tile 9x9 Red				

SAMPLE TYPE CODES		RELINQUISHED BY	DATE & TIME
- Air	W - Wipe		
- Bulk	T - Tape		
- Dust	R - Rock		
- Soil	O - Other		

	5/19/10 10:00	M. Haust-Br
---	---------------	-------------

Fiber Count (NIOSH 7400)	OSHA with TWA	
PCM - Air	BPA Method 600/R-93/116	X
	NIOSH 9002 Method	
	EPA Point Count (200 Point Count)	
	EPA Point Count (400 Point Count)	
	EPA Point Count (1000 Point Count)	
	Gravimetric Point Count	
	Vermiculite Testing	
	C/A,R,B, 435 Method- Pre-crushed Sample	
	C/A,R,B, 435 Method- Regular Sample *TAT: 7 Business Days	
	EPA Screening Protocol Modified: Qualitative (Soil)	
	EPA Screening Protocol Modified: Semi-Quantitative (Soil)	
PLM - Soil Only		
Other Requests	Non-Asbestos Fiber Count (NIOSH 7400)-"B" Counting Rules	

RECEIVED BY	DATE & TIME
e	5/20/09 AM

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 Sunny Beach, Cal: 401 Atlantic Ave. #200, Long Beach, Cal 90807 * NVLAP #200377-0
 Chicago, Ill: 1779 N. Mill St. #102, Naperville, Ill 60563 * NVLAP #2107755-0
 Ft. Lauderdale, Fla: C301 NW 5th Way #240, Ft. Lauderdale, Fla 33309 * NVLAP #207735-0; LEAS # 014152
 Ft. Worth, Tex: 14600 Trinity Blvd. #1106, Ft. Worth, Tex 76155 * NVLAP #2107754-0; Texas DSHS # 014152

CONTACT INFORMATION

Company: SCS Engineers
Contact: Gerrine Shaver
Phone: 913-451-7510

PROJECT INFORMATION

Project ID: SLDC ASOM
Project Desc.: Adolescent Survey
Project Sampling
Site Code: Date & Time: 5/13/10
IO Number:

2

STD - Standard (DEFAULT)
ND - Next Business Day
SD - Same Business Day Rush*

SAMPLE ID

2207-18-02	Floor tile GYA-Red
2207-13-03	Floor tile - 9x9 - Black + Green
2207-19-01	Baseboard - black
2207-20-01	Black floor material
2207-21-00	Wall board + mastic
2207-21-02	Wall board + mastic
2207-21-03	Wall board + mastic
2207-22-01	Thermal insulation - boiler
2207-23-01	Thermal insulation - heater ex
2207-24-01	Thermal insulation - heater exchange
2207-25-01	Pipe lagging
2207-26-01	Pipe lagging - card board

SAMPLE TYPE CODES

Wipe	Air	Wipe
Tape <td>Bulk <td>Tape </td></td>	Bulk <td>Tape </td>	Tape
Rock <td>Dust <td>Rock </td></td>	Dust <td>Rock </td>	Rock
Other <td>Soil <td>Other </td></td>	Soil <td>Other </td>	Other

REFERENCES

[Handwritten signature]

DATE 4 FEB 1965

5/19/10 10:00

1111

Attachment

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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 Ft. Lauderdale, FL 33301 • NOLAP #200723-B; LELAP #04152
 Ft. Worth, TX 76102 • NOLAP #200723-B; LELAP #04152

CONTACT INFORMATION

Company: S&S Engineers
 Address: 10975 E. Market, Suite 100, Overland Park, KS 66211
 Contact: Garlic Shaver
 Phone: 913-451-7510

PROJECT INFORMATION

Project ID: SDLC ATC 02
 Project Desc: Asbestos Survey
 Project: Sampling
 Zip Code: 66211
 PO Number: 5/18/10

TURN AROUND TIME CODES - (TAT)

STD - Standard (DEFAULT)
 ND - Next Business Day
 SD - Same Business Day Rush
 * RUSHES AVAILABLE FROM LOCATIONS LISTED ABOVE

Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

SAMPLE ID	DESCRIPTION	Sample Type (Below)	TAT (Above)	Total Volume (For Air Sample Only)	NOTES
207-12-02	Drywall	B	STD		
207-22-01	Exterior Transite				
207-27-02	Exterior Transite				
207-27-03	Exterior Transite				
207-28-01	Roof Material - shingle				
207-29-01	Grey Roof Sealant				
207-30-01	Acoustic tile - double layer				
207-31-01	Acoustic tile - 12x12 - thick				
207-32-02	Acoustic tile - 12x12 - thick				
207-33-03	Acoustic tile - 12x12 - thick				
207-34-01	Paper behind acoustic tile				
207-35-02	Paper behind acoustic tile				

SAMPLE TYPE CODES

A - Air W - Wipe
 B - Bulk T - Tape
 D - Dust R - Rock
 SO - Soil O - Other

RELINQUISHED BY

Franklin S.

DATE & TIME

5/19/10 10:00 AM

RECEIVED BY

Matthew

DATE & TIME

5/20/10 9:00 AM

ASB

REQ1

PU

000660504

AM

Only

Other Requests

Non-Asbestos Fiber Count (NIOH 2400) - "B" Counting Rules

EPA Screening Protocol Modified: Qualitative (Soil)

EPA Screening Protocol Modified: Semi-Quantitative (Soil)

C.A.R.B. 435 Method - Regular Sample *TAT: 7 Business Days

C.A.R.B. 435 Method - Pre-crushed Sample

Vermiculite Testing

Gravimetric Point Count

EPA Point Count (1000 Point Count)

EPA Point Count (400 Point Count)

EPA Point Count (200 Point Count)

NIOH 9002 Method

EPA Method 600/R-93/116

OSHA with TWA

Fiber Count (NIOH 2400)

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Ft. Worth, TX 76155 • NVLAP #200723-01 LELAP #04152

CONTACT INFORMATION

Company: DS Engineers
Address: 10775 E. Home, Suite 100, Overland Park KS 66211
Contact: Gavin Shaner
Phone: 913-451-7510

PROJECT INFORMATION

Project ID: SDLC ATCON
Project Desc: Asbestos Survey
Project: Sampling
Zip Code: 66211
Date & Time: 5/18/10
PO Number:

TURN AROUND TIME CODES - (TAT)

STD - Standard (Default)
ND - Next Business Day
SD - Same Business Day Rush*
Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

*RUSHES AVAILABLE FROM LOCATIONS LISTED ABOVE

SAMPLE ID	DESCRIPTION	Sample Type (Below)	TAT (Above)	Total Volume (For Air Sample Only)	NOTES
207-32-03	Paper behind Acoustic tile	B	STD		
207-33-01	Floor tile 12x12 - Red				
207-33-02	Floor tile 12x12 - Red				
207-33-03	Floor tile 12x12 - Red				
207-34-01	Spray on Insulation				
207-34-02	Spray on Insulation				
207-34-03	Spray on Insulation				
207-02-02	Wall board				
207-35-01	Motel Awning				

SAMPLE TYPE CODES

A - Air
B - Bulk
D - Dust
SO - Soil
W - Wipe
T - Tape
R - Rock
O - Other

RELINQUISHED BY

5/19/10 10:00

M. Shaner

RECEIVED BY

DATE & TIME

5/20/10 9:44 AM

AS
RE

000660504

PCM - Air	Fiber Count (NIOSH 7400)	OSHA with TWA	EPA Method 600/R-93/116	NIOSH 9002 Method	EPA Point Count (200 Point Count)	EPA Point Count (400 Point Count)	EPA Point Count (1000 Point Count)	Gravimetric Point Count	Vermiculite Testing	C.A.R.B. 435 Method - Pre-crushed Sample	C.A.R.B. 435 Method - Regular Sample *TAT: 7 Business Days	EPA Screening Protocol Modified: Qualitative (Soil)	EPA Screening Protocol Modified: Semi-Quantitative (Soil)	Non-Asbestos Fiber Count (NIOSH 7400) - *B* Counting Rules	Other Requests

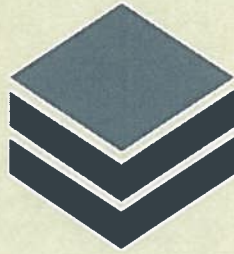
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AS 6060504

APPENDIX C

INSPECTOR CERTIFICATION



M·E·T·A

Mayhew Environmental Training Associates

I N C O R P O R A T E D

Certificate # 7ME12020901AIR0020

This is to certify that

Gracie Shaver

*has on 12/02/2009, in Lawrence, KS
completed the requirements for asbestos accreditation under Section 206 of TSCA Title II, 15 U.S.C. 2646*

AHERA Asbestos Building Inspector Refresher Course

*as approved by the U.S.E.P.A. under 40 C.F.R. 763 (AHERA)
on 12/02/2009 - 12/02/2009 and passed the associated examination on 12/02/2009
with a score of 70% or better
CM = 0.50 Pts.*



Thomas Mayhew

Instructor
Thomas Mayhew

Thomas Bradford Mayhew

President
Thomas Bradford Mayhew

Accreditation Expires: 12/2/10

M E T A - P.O. Box 786 - Lawrence KS 66044 - 800-444-6382

Expiration Date: **12/30/2010** Certificate Number: 7011120209MOIR13195

Training Date: **12/2/2009**

Missouri State Certificate for Asbestos Related Occupations

issued by Department of Natural Resources

P.O. Box 176

Jefferson City, MO 65102

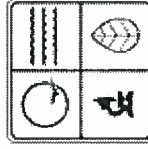
Phone (573) 751-4817

Gracie N. Shaver

has successfully completed the requirements for certification as a INSPECTOR. This Missouri State Certification is subject to review and the director may deny, suspend or revoke the certification per RSMo chapter 643.230.

12/30/2009

Date



James L. Karaman
Director of Air Pollution Control Program

APPENDIX D
PHOTO ALBUM



Photograph 1. Sample 207-04-01 –Interior window glazing.



Photograph 2. Sample 207-04-02 –Interior window glazing.



Photograph 3. Sample 207-05-03 –White non fibrous material on plaster.



Photograph 4. Sample 207-07-01 – Pipe lagging.



Photograph 5. Sample 207-07-02 – Pipe lagging.



Photograph 6. Sample 207-07-03 – Pipe lagging.



Photograph 7. Sample 207-10-02 White material on wallboard.



Photograph 8. Sample 207-13-01 Black and green 9"x9" floor tile and mastic.



Photograph 9. Sample 207-13-02 Black and green 9"x9" floor tile and mastic.



Photograph 10. Sample 207-13-03 Black and green 9"x9" floor tile and mastic.



Photograph 11. Sample 207-17-01 White HVAC insulation.



Photograph 12. Sample 207-22-01 Boiler insulation.



Photograph 13. Sample 207-23-01 Heater exchange insulation.



Photograph 14. Sample 207-24-01 Heater exchange insulation.



Photograph 15. Sample 207-25-01 White pipe lagging.



Photograph 16. Sample 207-26-01 Multicolored pipe lagging.



Photograph 17. Sample 207-27-01 Exterior transite.



Photograph 18. Sample 207-27-02 Exterior transite.



Photograph 19. Sample 207-27-03 Exterior transite.



Photograph 20. 207-29-01 Gray/black roofing sealant.



Photograph 21. 207-33-01 Red 12"x12" floor tile and mastic.



Photograph 22. 207-33-02 Red 12"x12" floor tile and mastic.



Photograph 23. 207-33-03 Red 12"x12" floor tile and mastic.



Photograph 24. 207-24-01 Spray on insulation.



Photograph 25. 207-34-02 Spray on insulation.



Photograph 26. 207-34-03 Spray on insulation.

APPENDIX E

FIELD NOTES

Date: 5/18/2010Location: St. Louis

Project: _____

Buildings: 207

Sample Number (Bldg-HM-Number)	Photo #	Material Description	Friability	Estimated Quantity	Condition	Sample Location
^ 207-01-01	1-2	Anti Static Floor Red + Pink	N	22x20 220'	G	SE corner 207 A
X 01-02	112					207 B
01-03						
* 207-02-01	3	Wall Board	N	22x12		SE corner 207-A W wall
207-03-01	5	Vapor Barrier				207-A N wall
207-04-01	4	Window glazing	N			207-A E wall
X 04-02	77	" "				Roof of 2nd Stor
04-03						
207-05-01	6	Plaster				207 A N wall
X 05-02	24	" "				207 J N wall
< 05-03	60	" "				207 M
207-06-01	7	Ceiling ^{board} mat.		25x60		207 C
X 06-02	13/14	" "				EW hall
X 06-03	58+59	" "				NS Hall
* 207-07-01	8	TSI Pipewrap				207 D S wall
X 07-02	15	" "				EW Hall
X 07-03	56+57	" "				NS Hall

Notes: _____

Date: _____

Location: _____

Project: _____

Buildings: _____

Sample Number (Bldg-HM-Number)	Photo #	Material Description	Friability	Estimated Quantity	Condition	Sample Location
X 207-08-01	9	Roof material tar + Rock				207 D
X 08-02	30	" "				207 M
A 08-03	38	" "				207 Q
X 207-09-01	10	"insulation" beneath Roof				207 D
X 09-02	29	" "				207 M
X 09-03	39	" "				207 Q
X 207-10-01	12	Hall Wall board				E w Hall W end
A 10-02	113					E end
X 207-11-01	11	Interior window glaze				
X 207-12-01		Drywall				Hall - E to W
X 207-13-01	16	Floor tile 9x9 Black + Green				207 I
X 13-02	17	" "				207 K
X 207-03-02	18	Vapor Barrier				207 J
X 207-14-01	19+20	Anti Static floor - Red + white		table 4x8		207 J table
X 207-15-01	21	Anti Static door Cream		Floor		207 J Floor
X 207-16-01	22+23	Ceiling tile		Rm J+K		207 J
X 16-02	31	" "				207 M
X 16-03	36+37	" "				207 Q

Notes: _____

Date: _____

Location: _____

Project: _____

Buildings: _____

Sample Number (Bldg-HM-Number)	Photo #	Material Description	Friability	Estimated Quantity	Condition	Sample Location
*207-17-01	25+26	HVAC insulation Horse hair				207 K
X 17-02	108	" "				Down in N-S Hall
*207-18-01	27	Red 9x9 floor tile		207 N M		207 M-S
X 18-02	114	" "				N side of N
*207-13-03	28	Floor tile Black + Green		207 N L		207 L
*207-19-01	32	Black Baseboard				207 M
*207 20-01	33+34	Black floor material				207 P
*207-21-01	35	Wall board harder w/ Black mastic				207 P
X 21-02	97-98	" "				RR center of NS 207 V RR
*21-03	99	" "				Men's RR V

Notes: _____

Date: _____

Location: _____

Project: _____

Buildings: _____

Sample Number (Bldg-HM-Number)	Photo #	Material Description	Friability	Estimated Quantity	Condition	Sample Location
*207-22-01	40	Boiler thermal insulation				Basement
*207-23-01	41	heater exchanger				" "
*207-24-01	42	" "				" "
*207-25-01	43	Pipe wrap				" "
*207-26-01	44-45	Pipe wrap + joint "sandboard"				" "
*207-27-02	60	Drywall				N S Hall
*207-27-01	78	transite				2nd story
*27-02	115					W side ext.
*27-03	116					S side
*207-28-01	86	Roof material "shingle"				Roof - S end
*207-29-01	85	gray roof sealant		* on Ar unit		Roof - edges of shingles
*207-30-01	88-90	double layer Acoustical tiles				
*207-31-01	91	thicker single layer Acoustic tile				N end of Bib Hall
*31-02	93	" "				207 R
*31-03	92					Bib Hall

Notes: _____

Location: _____

Buildings: _____

Notes: _____

Exhibit 2
Bid Proposal Form

BID PROPOSAL FORM
FORMER ATCOM FACILITY, ABATEMENT AND DEMOLITION
ST. LOUIS, MISSOURI

Bidder: _____

Address: _____

City, State, and Zip Code: _____

Telephone Number: _____

Grand Total Bid: _____

TO: Land Reutilization Authority of the City of St. Louis
1015 Locust Street, Suite 1200
St. Louis, Missouri 63101
Attention: Mr. Otis Williams

1. **General.** The Bidder, having familiarized itself with the existing conditions in the area of the work affecting the cost of the work, with the Bid Documents, which included the Invitation, Instructions to Bidders, the Form of Bid Proposal, the Bid Guaranty requirements, the Form of Non-Collusive Affidavits, the Form of Contract, the Performance and Payment Bond requirements, the General Conditions, the Special Conditions, the Technical Specification, Bid Documents, and Drawings and Addenda, if any thereto, as prepared by the St. Louis Development Corporation (SLDC), 1015 Locust Street, 12th Floor, St. Louis, Missouri 63101, and the Engineers, hereby proposes to furnish at the price indicated on this Bid Proposal, all technical personnel, labor, materials, equipment and services required to perform and complete all work required for the **Former ATCOM Facility, Abatement and Demolition.**
2. **Qualifications.** For the undersigned's Proposal to be considered for award of the contract, the following qualification documents, executed where necessary, are submitted herewith:
 - a. Contractor's Qualifications, including AIA Document 305 signed by an officer of the company
 - b. If the Bidder is a partnership or joint venture, provide a copy of the partnership or joint venture Contract.
 - c. The number of years Contractor has been engaged in construction work of a similar nature to this project.

- d. List of full time on-site supervisory personnel to be engaged in the contract, their name, title, resumes, references, length of service with Contractor's company, specific experience including the size and dollar value of projects supervised for the on site supervisor who will be responsible for the work under this project. The identified supervisory official shall have complete authority to speak for and make commitments for the Contractor. The supervisory official shall have a minimum of five years experience in projects of similar size and scope, and submit a list of owner contacts for projects performed within that five (5) year period. It is expected that the identified supervisory official will be committed, full time, to the Project from award of the Contract through to completion. Failure to so commit the identified supervisory official shall subject the bid to rejection, at the sole discretion of SLDC.
- e. A complete list of contracts performed by the Bidder involving work similar in nature, scope or technical requirements to that required for this Project, including names, addresses, telephone numbers and contact persons of the owners.
- f. A complete list of contracts the Contractor has performed or entered into within the last five years, in excess of one million (\$1,000,000.00) dollars total value, including names, addresses, telephone numbers and contact persons of the owners and engineers involved in each such contract.
- g. With respect to any means, methods or procedures that are not specified in the Contract Documents, a detailed description of the means, methods or procedures that will be employed by the Bidder in connection with the performance of the work on the Project.
- h. Detailed project schedule for all work reflecting completion by September 30, 2012.
- i. Evidence of Contractor's ability to obtain Performance and Payment Bond as required by the Bid Documents, shown by a letter signed by the Contractor's bonding company.
- j. Evidence of Contractor's ability to obtain insurance as required by the Bid Documents, shown by a letter signed by the Contractor's insurance company; and addressing specifically each item under the Section 130, Submittals and Notifications, Part 1 – General, section 1.3(K): Insurance. In addition, each Bidder shall identify the broker who will procure all required insurance coverage for the Bidder, if the Bidder is successful, and the company or companies that will act as insurers in such event.
- k. Credentials and copies of licenses of the landfill site and operator to be used for waste materials/debris.
- l. Each Bidder shall:
 - i. submit with its Proposal, a notarized statement describing any citations and /or violations issued by any regulatory agency concerning performance on previous contracts,

- ii. briefly describe the circumstance(s) involving the job(s) and citation(s)/ violation(s) and involved persons and agencies,
- iii. discuss the outcome(s) of any violation(s), and
- iv. answer the question, "has your firm or its agents been issued a Stop Work Order on any project within the last 24 months?" If the answer to the questions is "yes", provide details as specified above.
- m. Each Bidder shall answer the question, "Are you now or have been in the past, a party to any litigation or arbitration arising out of your performance of any contract?" If the answer to the question is "yes", provide details as specified in (l) above. You shall describe any liquidated damages assessed against you within the last 24 months.

Failure to report properly or truthfully any of the required information in Section 2, Qualifications, shall be considered sufficient cause for SLDC's rejection of the submitted Bid. In addition, SLDC reserves the right to take such steps as it deems necessary to determine the ability of each Bidder to perform the work. The Bidder shall provide to SLDC such additional information and data for this purpose as SLDC may request. SLDC reserves the right to reject any bid or Bidder for any reason considered by SLDC to be relevant to the Bidder's potential performance, including but not limited to SLDC's investigation or consideration of the information submitted by such Bidder.

The Bidder has indicated, in figures, a Price for each of the separate items called for in the Proposal, and has shown the Gross Sum ("Total Bid") in the place indicated in the Proposal as the summation of said items.

In case of discrepancy between the Gross Sum shown in the Proposal and that obtained by adding the items of the work, the Bidder agrees that the sum of the items shall govern, and any errors found in said Sum may be corrected by SLDC.

Unbalanced proposals on which the prices for some items are out of proportion to the prices for other items will be considered as sufficient cause for the disqualification of a Bidder and the rejection of its proposal.

The Bidder agrees that SLDC may reject its bid for any or no reason and award the contract to another party, and hereby waives any claim of damages for same.

If written notice of acceptance of the above bid is mailed, transmitted, faxed, or delivered to the Bidder within ninety (90) calendar days after the opening thereof, or at any time thereafter before this bid is withdrawn, the Bidder agrees to execute and deliver a Contract in the prescribed form and to furnish the required bond and insurance within five working days after the Contract is presented to it for signature.

Security in the sum of _____ Dollars
 (\$ _____) in the form of _____
 is submitted herewith in accordance with the Instructions to Bidders.

Attached hereto is an affidavit of proof that the Bidder has not colluded with any person with respect to this bid or any other bid submitted for this Contract.

The Bidder has submitted or has enclosed financial and experience statements in accordance with the Bid Documents.

Receipt is hereby acknowledged of the following addenda:

<u>Addendum No.</u>	<u>Dated</u>	<u>Acknowledged</u>

3. **Prices.** The following price breakdown must be filled out for the purpose of bid evaluation and to establish a schedule of values for the work. Bidders are reminded that the goals of this project are:

- a) Clearing and Grubbing,
- b) Wet Demolition Abatement of Wood Portion of Proof House,
- c) Asbestos Removal in Concrete Portion of Proof House, and
- d) Asbestos Removal in Underground Firing Tunnels,

as funding will allow. **The Grand Total Bid will be used in determining the selected bidder, but it is likely that some bid items will not be included in the final contract.** It is mandatory that the bidder physically verify all quantities presented in Section 0105 – Summary of Work to ensure that the bidder's response is comprehensive and accurate. The bid prices shall include all labor, materials, overhead, profit, insurance, taxes, fees, permits, etc. to cover the finished work:

GRAND TOTAL BID: _____ Dollars, \$ _____

Base Bid Item #1 – Clearing and Grubbing

\$ _____

Base Bid Item #2 – Wet Demolition Abatement of Wood Portion of Proof House

\$ _____

Base Bid Item #3 – Asbestos Removal in Concrete Portion of Proof House

\$ _____

Base Bid Item #4 – Asbestos Removal in Underground Firing Tunnels

\$ _____

The contractor is also requested to provide unit rates in the Schedule below for potential additional ACM that may be identified after bid submittal but prior to bid award:

UNIT RATE SCHEDULE

Material	Unit	Unit Rate
Pipe Insulation	LF	
Mudded Pipe Fitting	Fitting	
Transite	SF	
Floor Tile	SF	
Floor Tile/Mastic	SF	
Window Caulking/Glazing	LF	
Plaster	SF	
Fire Doors	Door	
Boiler Insulation	SF	
Heat Exchange Insulation	SF	
Floor Debris	SF	
Spray on Insulation	SF	

NOTES: LF - Linear Feet
SF - Square Feet

4. **Landfills.** The names and addresses of the landfill facilities that will be used on the project are (use additional sheets as necessary):

Landfill #1

Name: _____

Address: _____

Phone No.: _____ Fax No.: _____

Landfill #2

Name: _____

Address: _____

Phone No.: _____ Fax No.: _____

Landfill #3

Name: _____

Address: _____

Phone No.: _____ Fax No.: _____

5. **Subcontractors.** The names and addresses of the major subcontractors who will be used on the project are (use additional sheets as necessary):

Name	Address	Specialty
a. _____	_____	_____
b. _____	_____	_____
c. _____	_____	_____
d. _____	_____	_____
e. _____	_____	_____

The undersigned further declares that it has carefully examined the Bid Documents, plans, specifications, and the job site, and has satisfied itself as to all quantities and conditions and

understands that in signing this proposal, it waives all right to plead any misunderstanding regarding these documents and conditions.

The total fee proposed to accomplish all of the work indicated on the plans and specifications shall be reflected in the above line item breakdown. In the event that there is some doubt as to where a specific material or labor cost should be included, Contractor shall verify with SLDC or provide a written clarification as to the description of work included in a specific category. This proposal shall be binding on all of the heirs, successors, assigns, executors, and administrators of the undersigned.

BIDDER: _____

ADDRESS: _____

BY: (PRINT): _____

SIGNATURE: _____

TITLE: _____

FED. I.D. #: _____

DATE: _____

PHONE: _____ FAX: _____

Corporate Seal if a Corporation

ATTEST: _____

DATE: _____

Exhibit 3
Mayor's Executive Order #44



EXECUTIVE DEPARTMENT
MAYOR'S OFFICE
ST. LOUIS

EXECUTIVE ORDER NO. 44

An Executive Order relating to minority and women business enterprises' participation in City contracts:

WHEREAS, Clarence Harmon, as Mayor of the City of Saint Louis, executed an Executive Order Number 28 on July 24, 1997, relating to minority and women's business enterprises' participation; and

WHEREAS, Francis G. Slay, Mayor of the City of Saint Louis, extended Executive Order Number 28 by issuing Executive Orders numbered 33, 34, 36 and 39; and

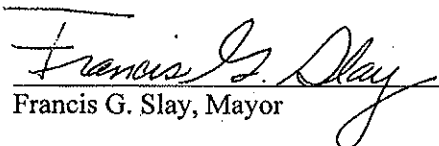
WHEREAS, Executive Orders numbered 33, 34, 36 and 39 assisted in enhancing the opportunities of minorities and women in participating fully in City-funded contracts; and

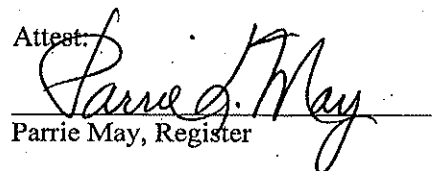
WHEREAS, Executive Order Number 39 expires on April 30, 2009; and

WHEREAS, it is in the best interests of the City to continue to utilize the skills of minority business enterprises and women's business enterprises in City-funded contracts.

NOW THEREFORE, I, Francis G. Slay, Mayor and Chief Executive Officer of the City of Saint Louis, hereby reissue and extend Executive Order Number 28 until April 30, 2013, unless a new Executive Order dealing with the same subject matter supersedes this reissuance and extension.

IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the seal of the City of Saint Louis this 30 day of April, 2009.


Francis G. Slay, Mayor

Attest:

Parrie May, Register



EXECUTIVE DEPARTMENT
MAYOR'S OFFICE
ST. LOUIS

EXECUTIVE ORDER NO. 39

An Executive Order relating to minority and women business enterprises' participation in City contracts:

WHEREAS, Clarence Harmon, as Mayor of the City of Saint Louis, executed an Executive Order Number 28 on July 24, 1997, relating to minority and women's business enterprises' participation; and

WHEREAS, Francis G. Slay, Mayor of the City of Saint Louis, extended Executive Order 28 by issuing Executive Orders numbered 33, 34 and 36; and

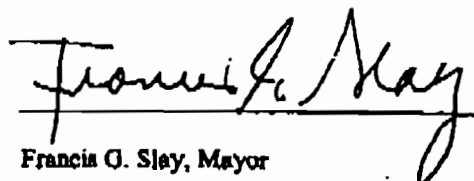
WHEREAS, Executive Orders numbered 33, 34 and 36 assisted in enhancing the opportunities of minorities and women in participating fully in City-funded contracts; and

WHEREAS, Executive Order Number 36 expires on June 30, 2006; and

WHEREAS, it is in the best interests of the City to continue to utilize the skills of minority business enterprises and women's business enterprises in City-funded contracts.

NOW, THEREFORE, I, Francis G. Slay, Mayor and Chief Executive Officer of the City of Saint Louis, hereby reissue and extend Executive Order Number 28 until April 30, 2009.

IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the seal of the City of Saint Louis this 7th day of June, 2006.


Francis G. Slay, Mayor

Attest:

EXECUTIVE ORDER

MINORITY AND WOMEN-OWNED BUSINESS PARTICIPATION ON CITY CONTRACTS

An Executive Order relating to minority and women's business enterprises' participation in City contracts.

WHEREAS, the City of St. Louis is particularly concerned that local minority and women's business enterprises be afforded an equal opportunity to participate and be utilized in City-funded contracts; and

WHEREAS, there is ample evidence that there has been discrimination against minority and women's business enterprises in the City of St. Louis and the effects of that discrimination are continuing; and

WHEREAS, it is the policy of the City of St. Louis to rectify the effects of identified discrimination within its jurisdiction; and

WHEREAS, it is the city's goal to fully utilize the skills of minority business enterprises and women's business enterprises in all sectors of the economy so as to best advance the City's economic and business development objectives; and

WHEREAS, the City of St. Louis, Missouri, the St. Louis Minority Contractors Association, Inc., and the United States Department of Housing and Urban Development entered into a Consent decree in the United States District Court for the Eastern District of Missouri on or about December 11, 1990 toward the end of establishing a program to enhance the opportunities of minority and women's businesses to participate fully in City-funded public work contracts; and

WHEREAS, the Board of Aldermen adopted Ordinance Number 62035, approved July 29, 1990, establishing a review committee to make recommendations to the Board.

SECTION ONE. DEFINITIONS

For purposes of this policy, the following terms have the meanings indicated:

1. **Minority Business Enterprise (MBE):** a sole proprietorship, partnership, or corporation owned, operated, and controlled by minority group members who have at least 51% ownership. The minority group member(s) must have day to day operational and managerial control, and an interest in capital and earnings commensurate with his or her percentage of ownership.
2. **Minority Group member(s):** persons legally residing in the United States who are African-American, Asian-American, Native-American or Hispanic-American.
3. **Women's Business Enterprise (WBE):** a sole proprietorship, partnership, or corporation owned, operated and controlled by a woman or women who have at least 51% ownership. The woman or women must have day to day operational and managerial control, and an interest in capital and earnings commensurate with her or their percentage of ownership.
4. **Certification:** The process by which the St. Louis Development Corporation determines a person, firm, or legal entity to be a bona fide minority or women's business enterprise.
5. **Contracting Agency:** Any Agency or Department making a contract on behalf of the City of St. Louis.

SECTION TWO. POLICY

It is hereby declared to be the policy of the City of St. Louis that the effects of identified discrimination against minority business enterprises and women's business enterprises within its jurisdiction shall be eradicated as part of the overall City business and economic development strategy. The method that the City shall employ to implement that policy is the establishment of a goal of at least

25% minority business enterprise participation and at least 5% women's business enterprise participation in contracts and purchases wherein City funds are expended. That goal shall be pursued by the programs described below.

SECTION THREE. PROGRAM ADMINISTRATION

1. SLDC shall be charged with overall responsibility for the administration and enforcement of the City's minority and women's business enterprise participation policy. SLDC will establish procedures for all contacting agencies for the purpose of monitoring the City's overall performance with respect to minority and women's business enterprise participation. The duties and responsibilities of SLDC shall include:

- (a) adopting rules and regulations to effectuate this order;
- (b) developing and distributing a directory of certified MBE's and WBE's;
- (c) providing information and needed assistance to MBE's and WBE's to increase their ability to compete effectively for the award of City contracts;
- (d) investigating alleged violations of this order and making written recommendations for remedial action when appropriate;
- (e) developing and distributing all necessary forms, applications, and documents necessary to comply with implement and effectuate this order;
- (f) reviewing, on a regular basis, the progress of each contracting agency toward achieving the goals for the utilization of minority and women's business enterprises and making an annual report as of June 30 of each year, which report shall be delivered to the Mayor no later than September 30, commencing September 30, 1998, reporting that progress which has been made, together with recommendations as to such further remedial action that should be taken, if any;

- (g) making recommendations to appropriate City officials regarding methods to further the policies and goals of this order;
 - (h) monitoring contractors throughout the duration of the contract to ensure that all efforts are made to comply with the requirements of this order; and
 - (i) certifying that the requirements of this order have been satisfied before contracts are signed or countersigned.
2. It shall be the responsibility of the contracting agency to ensure that bids or proposals from the agency adhere to the procedures and provisions set forth in this order.
- (a) The contracting agency director or designee shall assume primary responsibility for achieving the goals of this program and shall review, on a continuing basis, all aspects of the program's operations to assure that the purpose is being attained;
 - (b) The contracting agency shall take the following actions to ensure that MBE's and WBE's have maximum opportunity to participate on City contracts for which bids are solicited:
 - (i) the advertisements for bids, if any, shall appear in the City Journal no less than 21 days before bids are due for specific contracting opportunities, except where the contracts are awarded on an emergency basis;
 - (ii) a written notification shall be sent to such minority and women's trade and professional associations and contractors' associations as are designated by SLDC about the availability of contracting opportunities no less than 21 days before bids are due, except where the contracts are awarded on an emergency basis, in which case the notice shall be sent as soon as may be;
 - (iii) all contract solicitations shall include the MBE/WBE policy and any other materials required;

- (iv) all contracting opportunities shall be evaluated in an effort to divide the total requirements of a contract to provide reasonable opportunities for minority and women's business enterprises;
 - (v) guidelines shall be established to ensure that a notice to proceed is not issued until signed letters of intent or executed agreements with the MBE's and WBE's proposed in the bid documents have been submitted; and
 - (vi) actions shall be taken to ensure that all required statistics and documentation are submitted to SLDC as requested.
- (c) The contracting agency shall annually formulate a contract forecast estimating the number, probable monetary value, type of contracts and the estimated solicitation date for the contracts the contracting agency expects to award in the upcoming year. In addition, an implementation plan describing how the contracting agency will accomplish its MBE/WBE utilization goals shall be formulated. Each contracting agency will submit these documents to SLDC on or before June 30.
- (d) The contracting agency shall make quarterly reports to SLDC concerning the agency's progress in achieving the goals established by this order.
3. It shall be the responsibility of each bidder and proposer to adhere to the procedures and provisions set forth in this order.
- (a) each bidder and proposer must complete an MBE and WBE Utilization Form and identify therein its commitment, if any, to utilize MBE's and WBE's. Any failure to complete and sign the MBE and WBE utilization form will result in the bid or proposal being declared nonresponsive. In its response to an invitation to bid or request for proposal, the bidder or proposer shall include the names of minority and women's business enterprises to whom it

intends to award subcontracts, if any, the dollar value of the subcontracts, and the scope of work to be performed;

- (b) it is the bidder's or proposer's responsibility to ensure that all MBE's and WBE's projected for use have been certified by the City prior to bid opening;
- (c) whenever additional contract supplements, extra work orders, or change orders are made that individually, or in the aggregate, increase the total dollar value of the original contract, the contractor shall make every effort to maintain the level of MBE and WBE participation as established in the original contract;
- (d) the awardee of a contract must submit copies of executed agreements with the MBE's and WBE's being utilized;
- (e) the awardee of a contract must submit reports and documentation as required by SLDC, verifying payments to the MBE's and WBE's being utilized.

4. Contracting Agencies, contractors, subcontractors, and the construction clearinghouses shall consider, and follow where appropriate, the following guidelines in making good faith efforts to meet the goals of this order. All good faith efforts shall be made prior to bid opening. These guidelines are not all inclusive.

SHARED RESPONSIBILITIES FOR GOOD FAITH EFFORTS

(a) CONSTRUCTION CLEARINGHOUSE

The SLDC's contractors assistance agency and construction clearinghouse, the Contractor's Assistance Program (CAP), will distribute information on the City's needs to all of the M/WBEs who may be interested in performing all or part of the work that the City requires.

(i) DISTRIBUTION OF INFORMATION

By first class mail, fax or E-mail, the construction clearinghouse shall promptly distribute all information that the City and its plan holders may provide. The clearinghouse shall act on all information that it receives in no more than two business days.

(ii) DIRECTORY OF M/WBES IN THE RELEVANT AREA

The construction clearinghouse shall have access to sufficient quantities of the SLDC M/WBE Directory and the St. Louis Airport Authority's DBE Directory, including but not limited to information on the categories of work that each firm performs.

(iii) BONDING AND INSURANCE

The construction clearinghouse shall create and regularly update a directory of the bonding and insurance agents in the relevant area. Upon request, the clearinghouse should give a copy of the directory to any interested party. In addition, the clearinghouse should be prepared to provide the name, address and telephone number of a bonding or insurance agent who may be able to respond to a firm's request for assistance. The clearinghouse should also encourage and facilitate liaison between the bonding and insurance industries and the M/WBES in the relevant area.

(b) CONTRACTING AGENCIES

(i) GENERAL

The City shall ensure, to the extent practical, that its plans and specifications are clear and reflect the actual requirements. The City shall delete any contractual provisions that would require M/WBES to take unreasonable business risks.

(ii) ADVERTISING

The City will publicly advertise every project, taking advantage of general circulation magazines and newspapers, and any publications that target minorities or business women in the relevant area. The City shall also use the construction clearinghouse to notify all M/WBEs of all business opportunities.

The City should run its advertisements and notify the clearinghouse as soon as practical, but not less than two weeks before the date on which bids are due.

The City's advertisements and its notice to the clearinghouse shall include:

- The date, time, place and contact person for any pre-bid meeting;
- Expressly encourage M/WBEs to bid for the prime contract, or to the prime contractors holding plans for the project;
- Estimate the subcontracting opportunities that the project will provide, including but not limited to the type of work that prime contractors are likely to subcontract; and
- Explain that the City has provided a copy of the plans and specifications to the construction clearinghouse.

(iii) PRE-BID MEETINGS

The City may conduct a pre-bid meeting or make its project manager readily available to discuss the project with interested parties. In addition, the City shall reduce all questions and answers to writing and should promptly provide that information to all plan holders, including the construction clearinghouse.

The City shall use at least part of any pre-bid meeting to encourage prime contractors and M/WBEs to work together, providing an opportunity for all firms to identify themselves, and for all M/WBEs to identify the type (s) of work that

they perform. The City should also emphasize that it expects all firms to perform a commercially useful function.

(iv) PLAN HOLDERS

No more than seven calendar days after it has advertised the project, the City should give a list of plan holders to the construction clearinghouse, including the name, street address, telephone number, fax number, E-mail address and contact person for each firm. The City should update the list of plan holders at least once a week.

(v) PLANS AND SPECIFICATIONS

The City shall provide one copy of its plans and specifications to the construction clearinghouse free of charge. The plans and specifications shall be provided on the same date on which the project is formally advertised.

The City shall expressly direct and require its design professionals to satisfy these requirements and to make themselves readily available to all contractors, to the extent necessary to eliminate any ambiguities.

In addition, the City shall reduce all questions and answers to writing and should promptly provide that information to all plan holders, including the construction clearinghouse.

(c) PRIME CONTRACT BIDDERS AND OTHER PLAN HOLDERS

(i) NOTICE TO CLEARINGHOUSE

Any firm that intends to bid for the prime contract should have a notice of its intention delivered to the construction clearinghouse as soon as feasible, but no fewer than seven calendar days before the date on which the firm desires to have all quotes in hand.

That notice may be delivered by fax or E-mail, but should be in writing, in addition, it should:

- Include the name, street address, fax number, telephone number and E-mail address of a contact person;
- Specify the items of work that the plan holder may subcontract; and
- Expressly encourage M/WBEs to quote those items.

(ii) PRE-BID MEETINGS

The prime contract bidder should attend any pre-bid meeting that the City may schedule.

(iii) FOLLOW-UP WITH M/WBEs

The prime contract bidder should promptly return all calls, faxes, and E-mail that it receives from interested M/WBEs. The follow-up should take the form of a telephone call, fax or E-mail during normal business hours.

(iv) PLANS AND SPECIFICATIONS

Upon request, the plan holder should permit any interested M/WBE to review the project's plans and specifications at the plan holder's place of business during normal business hours. In addition, the prime contract bidder should have a least one employee available to help the M/WBE identify the specific item(s) in which the latter may have an interest.

(v) BONDING AND INSURANCE

The prime contract bidder should be encouraged not to deny a subcontract to an otherwise qualified and competitive, and if necessary, certified M/WBE solely because the latter cannot provide a performance or payment bond for the work, unless the bidder's bonding is contingent upon bonding for all subcontractors.

(vi) BID PACKAGES

The prime contract bidder should break its subcontracts down into discrete items or packages that at least some of the M/WBEs in the relevant area may find economically feasible to perform.

The prime contract bidder should not deny a subcontract to an otherwise qualified and competitive M/WBE solely because the latter cannot perform an entire package of related items, but the bidder may deny a request to repackage the work where doing so would jeopardize scheduling, or increase that bidder's cost of performing the original package by more than 5%.

(vii) SUBCONTRACTOR QUOTES

Where two or more quotes cover the same item(s) of work, the prime contractor bidder should have the discretion to accept the low quote.

(viii) LETTER OF INTENT

No more than five business days after the bid date, the prime contract bidder should send a letter of intent to the M/WBEs that the bidder intends to use on the project.

(ix) REASONS FOR REJECTION

No more than one week after it determines that it has been successful, the prime contract bidder should also communicate with any M/WBE that unsuccessfully bid for a portion of the work. The prime contract bidder should provide a legitimate and non-discriminatory reason for not using the M/WBE.

(x) WRITTEN POLICY

Independent and apart from its interest in any one project, the prime contract bidder should have a written policy stating that it affirmatively supports

subcontracting to M/WBEs, and that bringing such firms into the mainstream of the construction industry is a priority for that firm. This policy shall be made available to the City upon request.

(xi) LIAISON WITH M/WBEs

Independent and apart from its interest in any one project, the prime contract bidder should assign a senior official the responsibility of serving as a liaison between the firm and the M/WBEs in the relevant area.

(d) MINORITY AND WOMEN BUSINESS ENTERPRISES

(i) PRE-BID MEETINGS

The M/WBEs should attend any pre-bid meetings that the City may schedule.

(ii) EXPRESSION OF INTEREST

The M/WBE shall promptly call, send a fax or E-mail to any prime contract bidder to whom it would like to provide a quote. The M/WBE should clearly express an interest in providing a quote. The M/WBE should also send a notice of its interest in the project to the construction clearinghouse. To the extent practical, the M/WBEs should take such actions during normal business hours and at least five business days before the date on which bids are due.

(iii). SCOPE LETTER

At least five business days before the date on which bids are due, the M/WBEs should also give the prime contract bidder a scope letter that clearly defines the items that the M/WBE would like to perform.

SECTION FOUR. PUBLIC WORKS CONTRACTS

1. This section shall be applicable to all contracts let for public works contracts or improvements.

2. If a prime contractor's bid does not indicate an intent to utilize a minimum of 25% MBE participation and 5% WBE participation, the contractor shall request a waiver from the contracting agency who then must submit such request to SLDC.
3. SLDC will grant a waiver from meeting the 25% MBE and 5% WBE goals, or some portion of them, when documentation submitted by the bidder substantiates that all available resources have been exhausted in locating and soliciting bids or proposals from minority and women contractors, suppliers, and service providers.
4. MBE and WBE participation shall be counted in accordance with the following provisions:
 - (a) A contracting agency may count as MBE or WBE participation only expenditures to MBE's and WBE's that perform commercially useful functions in the execution of a contract. An MBE or WBE is considered to perform a commercially useful function when it is responsible for executing a distinct element of the work and carrying out its responsibilities by actually performing, managing, and supervising the work involved. To determine whether an MBE or WBE is performing a commercially useful function, SLDC will evaluate the amount of work subcontracted, industry practices, and other relevant factors.
 - (b) A contracting agency may count as MBE or WBE participation the total dollar value of a contract with an MBE or WBE prime contractor less any amount that is subcontracted to non-MBE's/WBE's (including any persons or firms that are identified as MBE and/or WBE but are not so certified by the City of St. Louis).
 - (c) The total dollar value of a contract with an enterprise owned and controlled by minority women may be counted as either minority or women's business participation, but not both. The contracting agency must choose which category of participation to which the dollar value is applied.

- (d) A contracting agency may count as MBE or WBE participation a portion of the total dollar value of a contract with a joint venture equal to the percentage of MBE or WBE participation in the joint venture. The joint venture must be certified by the City of St. Louis and the MBE or WBE participant in the joint venture must be responsible for a clearly defined portion of the work to be performed, equal to a share in the ownership, control, management, responsibility, risks and profits of the joint venture.
- (e) A contracting agency may count toward a bidder's MBE and WBE goals expenditures for material and supplies obtained from MBE/WBE suppliers and manufacturers, provided that the MBE/WBE assumes the actual and contractual responsibility for the provision of materials and supplies.
- (i) A contracting agency may count a bidder's entire expenditure to a MBE/WBE manufacturer. A manufacturer is defined as an individual or entity that produces goods from raw materials or substantially alters them before resale.
- (ii) The bidder may count twenty percent (20%) of its expenditures to MBE/WBE suppliers that are not manufacturers.
- (f) A contracting agency may count as MBE or WBE participation the entire expenditure to an MBE or WBE supplier when the supplier:
- (i) assumes the actual and contractual responsibility for furnishing the supplies and materials; and
- (ii) is recognized as a distributor by the industry involved in the contracted supplies and materials; and
- (iii) owns or leases a warehouse, yard, building or whatever other facilities are viewed as customary or necessary by the industry; and
- (iv) distributes, delivers and services products with its own staff and/or equipment.

- (g) A contracting agency may count as MBE and WBE participation only those firms that have been certified as MBE's and WBE's by SLDC prior to bid opening. If a firm listed by a bidder in its bid documents has not been so certified as MBE or WBE, the amount of participation it represents will be deducted from the total MBE or WBE participation proposed to determine the actual level of MBE and WBE participation proposed by the bidder.
 - (h) Joint ventures or mentor-protégé-relationships between prime contractors and subcontractors with local MBE and WBE firms are encouraged.
 - (i) Participation of MBE and WBE firms located outside of the St. Louis Metropolitan Statistical Area (MSA) shall not count towards the goals established in this order.
5. To meet the requirements of the order, the following guidelines must be followed by prime contractors:
- (a) For any work to be subcontracted or materials to be supplied, prime contractors shall solicit bids from MBE's and WBE's to the maximum extent possible, referring to the City's Directory as necessary. All firms, including non-MBE's and non-WBE's, should be solicited in the same time period. If an MBE or WBE firm submits the low or equally low bid for work to be subcontracted or materials to be supplied, the prime contractor shall use the MBE or WBE firm unless the bid is non-responsive or the prime contractor is able to document that the MBE or WBE firm is unqualified or otherwise unable to perform the work or supply the needed materials. Where second tier subcontracting is to occur, the same procedure shall be employed for each type of work or materials to be supplied under a second tier subcontract.
 - (b) All solicitations shall be made prior to the bid opening and there shall be no negotiation of bids or "bid shopping" by the contracting agency. Contractors

bidding on more than one contract must solicit bids from MBE's and WBE's for each contract for which they are bidding regardless of the proximity of the bid dates or the previous lack of responsiveness of MBE's and WBE's.

- (c) Prime contractors may count as MBE or WBE participation only those firms that have been certified as MBE's or WBE's by the City of St. Louis prior to the bid opening.
 - (d) Joint ventures or mentor-protégé relationships between prime contractors and subcontractors with local MBE and WBE firms are encouraged.
 - (e) Participation of MBE and WBE firms located outside the MSA shall not count towards the goals established in this order.
6. The contracting agency shall notify SLDC of the date and time for the formal bid opening. After the bids have been opened and read, the contracting agency will review the M/WBE Statement, included as part of the bid documents, to determine whether the low bidder intends to meet the MBE and WBE participation goals established by this order. If the low bidder does not meet the specified goals for MBE and WBE participation, the low bidder shall be instructed to request a total or partial waiver of the goals.
7. Within 48 hours following bid opening the apparent low bidder, and any other bidder still desiring to be considered for contract award, shall submit to the Contracting Agency the M/WBE Utilization Plan, and any other documents required by the bid documents, including, where appropriate, a request for waiver. If the M/WBE Utilization Plan does not meet the project goals, the bidder shall seek a partial or total waiver of the M/WBE goals. The application for waiver of all or part of the M/WBE goals shall include full documentary evidence of the bidder's good faith efforts to meet the goals prior to bid opening and why the request for waiver should be granted. The application, which shall

be in writing, must include a narrative, affidavits or exhibits which verify the actions taken by the bidder to meet the M/WBE goals.

8. The contracting agency will conduct a preaward conference following the bid opening. A representative from SLDC and SLDC's designated minority and women's contractors assistance agency shall attend this meeting. At that time, the contracting agency will review the bidder's proposed MBE and WBE participation. If the bidder fails to meet the goals established by this order, it will be allowed to request a waiver from those provisions. The waiver request must be supported by evidence establishing that the bidder has exhausted all available resources in locating and soliciting bids or proposals from minority and women's businesses and has found it impossible to meet the established goals. Denial of a waiver may be appealed by the bidder, within 10 days of notice of the denial, to the Mayor, who shall rule upon the appeal in due course. Failure on the low bidder's part to exhaust all reasonable methods in a good faith effort to solicit bids prior to bid opening from the MBE and WBE firms listed in the City's Directory may place the award of the contract to the low bidder in jeopardy.
9. Prior to the preaward conference, copies of the bid documents will be distributed to SLDC. SLDC will immediately begin a review of the bid documents and, within two weeks following the preaward conference, will make a recommendation as to the apparent low bidder's good faith efforts to meet the city's goals prior to bid opening. In making this determination, SLDC will contact MBE's and WBE's to verify that the apparent low bidder solicited bids from each of them, that the MBE and WBE subcontractor bid amounts listed accurately reflect the amounts actually quoted by those firms and, in the case of those MBE/WBE firms proposed to be utilized by the low bidder, that the apparent low bidder has tentative agreements with them in the amounts shown. For work being

subcontracted to non-MBE/WBE firms, SLDC will contact the certified MBE and WBE firms in that particular trade, service or supply area to verify that, after solicitation of bids by the proposed prime contractor, the MBE and WBE firms submitted high or non-responsive bids or no bids at all. After the verification process, SLDC may make a positive recommendation to the contracting agency for contract award to the low bidder and/or grant the request for a waiver to the MBE/WBE goals established by this order, or SLDC may recommend denial of the contract award and/or the request for a waiver. The contracting agency shall not award any contract in excess of \$10,000 without the positive recommendation of the SLDC.

10. Each contracting agency shall maintain files documenting the efforts of successful bidders to achieve the City's goals regarding utilization of minority and women's business. In addition, each contracting agency is responsible for documenting that the prime contractor (including MBE and WBE prime contractors) has signed and valid contracts with each MBE and/or WBE subcontractor proposed by the prime contractor in its bid documents. The contracting agency shall not authorize any payments to the prime contractor until acceptable documentation has been submitted to SLDC and the contracting agency.
11. At contract completion, the contracting agency shall obtain final documentation of MBE and WBE participation. The contracting agency must have complete and acceptable documentation as determined by SLDC of amounts paid to all project MBE and WBE subcontractors on file before the final payment is made to the prime contractor.
12. Representatives of the contracting agency and/or SLDC or its designee shall make periodic visits to the project site to verify minority and women's business enterprise participation.
13. In the event that a public works or improvement contract is awarded on an emergency basis, the contracting agency shall give preference to MBE's and WBE's if, at the time

that the contract is let, those contracts that have been awarded as of that date, do not, in the aggregate, meet the City-wide goals specified in this order.

14. The provision of this order shall be made part of all contracts regulated by this order.

SECTION FIVE. SERVICE CONTRACTS

1. It shall be the goal of each contracting agency where anticipated service contracts, including professional service contracts, for any year exceed the sum of \$150,000 in the aggregate that 25% of the aggregate value of contracts awarded each fiscal year be let with MBE's and that 5% of the aggregate value of contracts awarded each fiscal year be let with WBE's.
2. It shall be the goal of the city that of the aggregate value of contracts awarded by contracting agencies that anticipate letting service contracts, including professional service contracts, aggregating \$150,000 or less, 25% shall be let with MBE's and 5% be let with WBE's.
3. The methods by which contracting agencies shall pursue those goals shall include, but not be limited to,
 - (a) consultation with SLDC and observation of all rules and regulations promulgated by SLDC;
 - (b) active solicitations of proposals by MBE's and WBE's;
 - (c) encouragement of joint ventures or mentor-protégé relationships that include MBE's and WBE's;
 - (d) encouragement of subcontracting to MBE's and WBE's;
 - (e) solicitation of proposals from MBE and WBE firms in a time frame that will allow those firms to respond;
 - (f) division of contract requirements where possible to allow MBE's and WBE's reasonable contracting opportunities; and

(g) contacting minority and women trade and professional organizations to solicit participation.

4. All requests for services, including professional services, shall require proposers to make every good faith effort to utilize minority business enterprises and women's business enterprises as subcontractors and suppliers whenever possible. Proposers shall be required to submit their projected utilization of minority and women's business enterprises, if any, along with a description of the efforts made to utilize such businesses.
5. Each contracting agency shall make a report to SLDC of the MBE and WBE participation in each professional service contract that it makes.
6. Joint ventures or mentor-protégé relationships between prime contractors and subcontractors with local MBE and WBE firms are encouraged.
7. Participation of MBE and WBE firms located outside the MSA shall not count towards the goals established in this order.
8. Contracts with non-MBE's and non-WBE's shall be counted towards the MBE and WBE goals under the following circumstances and according to the following standards:
 - (a) where the non-MBE or non-WBE firm assigns one or more minority or women partners or owners, 75% of the billable hours attribute to that partner or owner shall be counted as MBE or WBE participation, as the case may be.
 - (b) where the non-MBE or non-WBE firm assigns one or more minority or women associates or employees, 25% of the billable hours attributed to the associates or employees shall be counted as MBE or WBE participation, as the case may be.
 - (c) where the non-MBE or non-WBE enters into a subcontract with an SLDC-certified MBE or WBE, that portion of the value of the contract that is subcontracted shall be counted as MBE or WBE participation as the case may be.

SECTION SIX. SUPPLY CONTRACTS

1. The goal of the City of St. Louis is that 25% of the value of all contracts let and purchases made by the Supply Commissioner shall be let or made with MBE's and that 5% of the value of all contracts let and purchases made by the Supply Commissioner shall be let or made with WBE's.
2. All contracts let by the Supply Division for the purchase or lease of materials, equipment, supplies, commodities or services, the estimated cost of which exceeds \$500, shall be subject to this goal;
3. The methods by which the Supply Commissioner shall pursue this goal shall include but not be limited to the following:
 - (a) The Supply Commissioner shall solicit bids from minority business enterprises and women's business enterprises certified to supply the required materials, equipment, supplies or services;
 - (b) SLDC shall provide the Supply Commissioner with a list of minority business enterprises and women's business enterprises qualified to provide each of those commodities that the Supply Commissioner indicates are required by the City;
 - (c) The Supply Commissioner shall notify SLDC prior to solicitation of bids whenever no such qualified businesses are available;
 - (d) SLDC shall attempt to identify such qualified businesses, and if successful, shall notify the Supply Commissioner of their availability; and
 - (e) The Supply Commissioner shall provide such minority business enterprises and women's business enterprises every practical opportunity to submit bids.
4. Joint ventures or mentor-protégé relationships between prime contractors and subcontractors with local MBE and WBE firms are encouraged.

5. Participation of MBE and WBE firms located outside the MSA shall not count towards the goals established in this order.

SECTION SEVEN. CONCESSION CONTRACTS

1. It shall be the goal of each contracting agency to award concession contracts in such a manner as to achieve the City's goals for MBE and WBE participation.
2. The methods by which contracting agencies shall pursue this goal shall include, but not be limited to, the following:
 - (a) consultation with SLDC and observation of all rules and regulations promulgated by SLDC;
 - (b) active solicitations of proposals by MBE's and WBE's;
 - (c) encouragement of joint ventures or mentor-protégé relationships that include MBE's and WBE's;
 - (d) encouragement of subcontracting to MBE's and WBE's;
 - (e) solicitation of proposals from MBE and WBE firms in a time frame that will allow those firms to respond;
 - (f) division of contract requirements where possible to allow MBE's and WBE's reasonable contracting opportunities;
 - (g) contacting minority and women trade and professional organizations to solicit participation.
2. All requests for concession proposals shall require proposers to make every good faith effort to utilize minority business enterprises and women's business enterprises as subcontractors and suppliers whenever possible. Concession contract proposers shall be required to submit their projected utilization of minority and women's business enterprises, if any, along with a description of the efforts made to utilize such businesses.

3. Joint ventures or mentor-protégé relationships between prime contractors and subcontractors with local MBE and WBE firms are encouraged.
4. Participation of MBE and WBE firms located outside the MSA shall not count towards the goals established in this order.

SECTION EIGHT. BONDING ASSISTANCE

SLDC shall develop a program to assist small business enterprises, including MBE's and WBE's in obtaining information and resources on the availability of bonding for public sector contracts. SLDC shall provide;

1. Individualized counseling;
2. Conduct seminars relating to bonding;
3. Explore methods of creating a bonding program for small businesses with public and private sector resources;
4. Monitor the bonding practices in the local market and to document any instances of discrimination in the bonding industry; and
5. Provide advice and information to the Board of Public Service or the appropriate user department as to the level of bonding generally available to subcontractors, so that such information may be considered in the process of reducing such projects to a size that small business enterprises might successfully bid.

SECTION NINE. FINANCIAL ASSISTANCE

SLDC will assist small business enterprises in locating available financial resources in the St. Louis business sector. SLDC shall:

1. Act as a clearinghouse for information on financial assistance programs for small business enterprises, MBEs, and WBEs;
2. Assist in packaging loan requests for small business enterprises;

3. Contract seminars relating to financing;
4. Monitor and document any instances of discrimination against small business enterprises, MBEs, and WBEs; and
5. Explore public and private resources to provide financial services to small business enterprises.

SECTION TEN. EMPLOYMENT

All firms doing business with the City of St. Louis are encouraged to act affirmatively to hire residents of the City of St. Louis as employees, with particular emphasis on residents of the City who are members of minority groups or who are women.

SECTION ELEVEN. CITY-FUNDED PROJECTS

All contracts between the City of St. Louis and a second party wherein the City of St. Louis provides City or other governmental funds to the second party and wherein the second party agrees to provide services or engage in a project shall contain a provision obligating the second party to observe the program established by this Order, except with respect to non-construction contracts to which not-for-profit corporations are a party.

SECTION TWELVE. PENALTIES

1. If SLDC determines that a contractor, bidder or proposer has failed to comply with the City's program regarding utilization of minority and women's business enterprises, it shall report its determination to the Mayor.
2. The Mayor, pursuant to Article VII, 1 of the Charter, may subject the offending party to any or all of the following penalties and sanctions:
 - (a) withholding of contract award;
 - (b) suspension of contract;
 - (c) withholding of payments;

- (d) rescission of contract based upon a material breach of contract pertaining to MBE and/or WBE participation;
 - (e) refusal to accept a proposal; and
 - (f) disqualification of a bidder, proposer or contractor from eligibility for providing goods or services to the City for a period not to exceed one year.
3. The Mayor shall report the imposition of any penalty to the Comptroller and to the City Counselor.

SECTION THIRTEEN. MINORITY AND WOMEN'S BUSINESS ENTERPRISE ADVISORY COMMITTEE

1. There is hereby created and established an advisory committee to be known as the Minority and Women Business Enterprise Advisory Committee.
2. The committee shall consist of the following ten (10) members appointed by the Mayor, with the consent of the Board of Aldermen:
 - (a) One (1) member of the Commission of the Civil Rights Enforcement Agency;
 - (b) One (1) member of the Contractors Assistance Program (CAP);
 - (c) One (1) member of the St. Louis Minority Contractors Association;
 - (d) One (1) member of the National Association of Women in Construction;
 - (e) One (1) member of the Associated General Contractors of St. Louis;
 - (f) One (1) member of the Hispanic Chamber of Commerce;
 - (g) One (1) member of the National Indian Community Association;
 - (h) One (1) member of the Asian-Americans for Equal Opportunity;
 - (i) One (1) member of the St. Louis Minority Business Council; and
 - (j) One (1) member of the St. Louis Council of Construction Consumers;

3. Members shall serve for staggered terms of three (3) years. Initially four (4) members shall be appointed for a term of three (3) years, three (3) members shall be appointed for a term of two (2) years and three (3) members shall be appointed for a term of one (1) year. Vacancies shall be filled in the same manner as the original appointments for the remainder of the vacant term. Each member shall serve without compensation.
4. The committee shall elect a Chairman and a Secretary who shall each serve for three (3) years. One (1) month prior to the end of the Chairman's and the Secretary's term, successors shall be elected. The committee shall adopt rules consistent with applicable laws for the conduct of its business.
5. The committee shall meet quarterly to review compliance with this Order. In addition, the committee shall at a minimum meet twice annually in open public session to receive general testimony from the public. All minutes and records of the committee shall be open to the public.
6. The committee shall monitor the effectiveness of the City's program described in this order and make such recommendations to SLDC as it sees fit. The actions, decisions and recommendations of the Committee are to further the policies and goals of this Order and shall not be final or binding on the City but shall be advisory only.

SECTION FOURTEEN. TERM

The program established by this order shall cease June 30, 2002, except SLDC shall submit its final report on September 30, 2002.

SECTION FIFTEEN. REPORT

No later than September 30, 1998 and beginning in 1998, and every year thereafter, SLDC shall deliver a report to the Mayor reviewing the progress made as of the preceding June 30 in achieving the

City's goals, and making such recommendations as to further remedial action that should be taken, if any.

SECTION SIXTEEN. FEDERAL AND STATE REGULATIONS

Projects that utilize federal or state funds in whole or in part must comply with any applicable federal or state regulations and such regulations may not be waived by the City.

Dated: July 24, 1997

Signed by: Clarence Harmon

Mayor, City of St. Louis

Exhibit 4
MBE/WBE Submission Instructions and Forms

M/WBE INDEX AND SUBMISSION INSTRUCTIONS

PAGE	FORM	SUBMITTED	SUBMITTED TO
MBE: 1	M/WBE UTILIZATION STATEMENT	With Bid Proposal	SLDC
MBE: 2-4	SUBCONTRACTOR LIST	Within 48 hours of Bid Opening	SLDC
MBE: 5-6	NOTICE OF INTENT TO PERFORM AS A SUBCONTRACTOR AND/OR MATERIAL SUPPLIER	Within 48 hours of Bid Opening	SLDC
MBE: 7-8	CONTRACTOR'S GOOD FAITH EFFORTS REPORT AND STATEMENT	Within 48 hours of Bid Opening	SLDC
	COPIES OF M/WBE SUBCONTRACTS	Upon execution of a contract with the City, the Contractor shall provide fully executed copies of all M/WBE subcontracts.	SLDC
MBE: 9	RECORD OF PAYMENTS TO SUBCONTRACTORS, MATERIAL SUPPLIERS AND OTHER VENDORS REPORT	The 15th of the month for the month preceding. (Example for January the report would be submitted by February 15th.	SLDC
MBE: 10	SUBCONTRACTOR OR SUPPLIER SUBSTITUTION FORM	Prior to substituting a subcontractor or supplier. Approval from the City is required prior to substitution.	SLDC
MBE: 11	FINAL RECORD OF PAYMENTS REPORT	Within 15 days after the completion of all work items to be performed under the contract.	SLDC

CITY OF ST. LOUIS
BOARD OF PUBLIC SERVICE
M/WBE UTILIZATION STATEMENT (PART B)

Policy: It is the policy of the City of St. Louis that minority and women-owned businesses, as defined in the Mayor's Executive Order of July 24, 1997, shall have an opportunity to participate in the performance of contracts utilizing City funds, in whole or in part. Consequently, the requirements of the aforementioned Executive Order apply to this contract.

Project and Bid Identification:

Contracting Agency: _____
Project Name: _____
Letting Number: _____ Date: _____
Contract MBE/WBE Goal: 25% MBE and 5% WBE Participation
Total Dollar Amount of Prime Contract: \$ _____
Total Dollar Amount of Proposed MBE: \$ _____ Percent MBE _____
Total Dollar Amount of Proposed WBE: \$ _____ Percent WBE _____

Obligation: The undersigned certifies that (s)he has read, understands and agrees to be bound by the bid specifications, including the accompanying exhibits and other items and conditions of the request for proposals regarding minority and women business enterprise utilization. The undersigned further certifies that (s)he is legally authorized by the respondent to make the statements and representations in the M/WBE Forms and Exhibits and that said statements and representations are true and correct to the best of his/her knowledge and belief. The undersigned will enter into formal agreements with the minority/women business enterprises listed in the Subcontractor List, which are deemed by the City to be legitimate and responsible. The undersigned understands that if any of the statements and representations are made by the respondent knowing them to be false, or if there is a failure of the successful respondent to implement any of the stated agreements, intentions, objectives, goals and commitments set forth herein without prior approval of the City, then in any such events, the contractor's act or failure to act, as the case may be, shall constitute a material breach of the contract, entitling the City to terminate the contract for default. The right to so terminate shall be in addition to, and not in lieu of, any other rights and remedies the City may have for other defaults under the contract. Additionally, the contractor may be subject to the penalties cited in Section Twelve of the Mayor's Executive Order #28

Assurance: I, acting as an officer of the undersigned bidder or joint venture bidders, hereby assure the City that on this project my company will (check one):

- _____ Meet or exceed contract award goals and provide participation as shown above.
_____ Fail to meet contract award goals but will demonstrate that good faith efforts were made to meet the goals and my company will provide participation as shown above.

Name of Prime Contractor(s): _____

Prime Contractor Authorized Signature

Title

Date

**CITY OF ST. LOUIS
BOARD OF PUBLIC SERVICE
M/WBE UTILIZATION STATEMENT (PART B)**

On the spaces provided below, please list each M/WBE firm proposed for utilization on this contract. Use additional sheets as necessary.

NAME OF FIRM

ESTIMATED AMOUNT

**CITY OF LOUIS
BOARD OF PUBLIC SERVICE
SUBCONTRACTOR LIST**

Prior to the final approval of any contract resulting from this letting, the apparent low bidder will be evaluated as to the proposed utilization of City certified minority and women-owned business enterprises. This is in addition to any and all requirements in accordance with the Mayor's Executive Order of July 24, 1997. **On the spaces provided below please list all subcontractors and suppliers, including M/WBEs, proposed for utilization on this project. Work to be self-performed by the bidder is to be included.**

FIRM NAME	MBE or WBE	BID ITEM(S) OF WORK TO BE PERFORMED	SUBCONTRACT OR SUPPLY CONTRACT AMOUNT

**CITY OF LOUIS
BOARD OF PUBLIC SERVICE
SUBCONTRACTOR LIST**

[illegible]

**CITY OF LOUIS
BOARD OF PUBLIC SERVICE
SUBCONTRACTOR LIST**

FIRM NAME	MBE or WBE	BID ITEM(S) OF WORK TO BE PERFORMED	SUBCONTRACT OR SUPPLY CONTRACT AMOUNT

CONTRACT BID TOTAL \$ _____

TOTAL AMOUNT OF MBE PARTICIPATION:

PERCENT MBE PARTICIPATION:

TOTAL AMOUNT OF WBE PARTICIPATION:

PERCENT WBE PARTICIPATION:

In considering all levels of subcontracting on City contracts the following categories of Bid Item(s) or Work and Trade have been suggested by various private and governmental organizations and professional groups involved in commercial and industrial construction: -- air conditioning, final clean-up, caulking, ceilings, conduit, concrete, cement, cabinets, doors, drainage, drilling, drywall, asphalt, carpentry, communications, electrical, equipment rental, excavating, elevators, earthwork, decorators, fencing, flooring, automatic sprinklers, foundations, brick masonry, pile caps, pile driving, sewers, stone masonry, insulation, tile setting and terrazzo, lathing and plastering, asbestos, painting, security guard service, sign painting, painting, insurance and bonding, photographers, plumbing, paving, grading, landscaping, toilet partitions, siding, roof decking, flooring, paperhangers, sky lights, steel erections, re-bars, sheet metal, movable partitions, ornamental iron, glazing, accessories suppliers, exterminators, millwork, wall covering, advertisers, data programmers, wrecking and demolition, sodding, construction and design consultants, hauling, financing institutions, public movers, specialties, carpeting, piping, heating, and sanitary and safety facilities.

Note: On attached sheets, provide the complete mailing address, telephone number, contact person and title for each firm listed on the previous pages. Additionally, provide the City Business License Number and Federal Identification Number for each.

Name of Firm

Signature and Date

**CITY OF ST. LOUIS
BOARD OF PUBLIC SERVICE**

NOTICE OF INTENT TO PERFORM AS A SUBCONTRACTOR AND/OR MATERIAL SUPPLIER

NAME OF PROJECT _____

LETTING NUMBER _____

PART I

(NOTE: Pursuant to the City's policies, M/WBE firms participating in the City's M/WBE Program must have "current" certification status with the City prior to bid opening. The M/W/DBE certification of any firm is effective for two (2) years from the date of written notification of certification. Firms not certified by the City can not be counted towards the City's M/WBE goals on this project. Firms certified by the U.S. Small Business Administration (SBA) must attach a copy of a the firm's 8(a) program approval letter from the SBA)

1. TO: _____
(Name of Contractor)

2. The undersigned intends to perform work in connection with the above project as (check one):

- | | |
|--|--|
| <input type="checkbox"/> an individual / sole proprietorship | <input type="checkbox"/> a partnership |
| <input type="checkbox"/> a corporation | <input type="checkbox"/> a joint venture |

3. The undersigned (check applicable statements:

- ☐ has been certified by the St. Louis Development Corporation (SLDC)
(Certification #_____).
- ☐ has been certified by the St. Louis Airport Authority (SLAA)
(Certification #_____).
- ☐ has a current 8(a) status with the U.S. Small Business Administration.

4. The undersigned is prepared to perform the following described work and/or supply the material listed in connection with the above project (where applicable specify "supply" or "install" or both.

and at the following price \$_____. With respect to the proposed subcontract described above _____% of the dollar value of such subcontract will be sublet and/or awarded to non-M/W/DBE subcontractors.

PART II: SUBCONTRACTOR PARTICIPATION

4b	Name of Firm Receiving Subcontract	Work to Be Performed	Amount of Subcontract

Total amount to be subcontracted out by M/WBE \$_____

(Name of Prime Contractor)

BY: _____
(Signature of Authorized Representative)

PHONE: _____

DATE: __/__/__

(Name of M/W/DBE Firm)

BY: _____
(Signature of Authorized Representative)

PHONE: _____

DATE: __/__/__

**CITY OF ST. LOUIS
BOARD OF PUBLIC SERVICE
CONTRACTOR'S GOOD FAITH EFFORTS STATEMENT**

In accordance with the Mayor's Executive Order of July 24, 1997, please indicate those efforts you made to regarding the utilization of minority and/or women-owned business enterprises (M/WBEs) on this contract.

	YES	NO
Attended the pre-bid conference held on this contract.		
Selected portions of work proposed to be performed by M/WBEs in order to increase the likelihood of meeting the participation goals.		
Solicited individual M/WBEs by written notification at least fourteen (14) calendar days prior to bid opening to participate in the contract as subcontractor, regular dealer, manufacturer, consultant, or service agency for specific items or type of work.		
Followed up the initial solicitation of interest by contacting M/WBE firms to determine whether or not said firms will submit a bid.		
Provided interested M/WBE firms with adequate information regarding plans, specifications and requirements for bidding on City-financed construction.		
Negotiated in good faith with M/WBE firms. M/WBE firms shall not be disqualified without sound reasons based upon a thorough investigation of their capabilities.		
Made efforts to negotiate with M/WBE firms for specific items of work.		
Made efforts to assist M/WBE firms that requested assistance in obtaining bonding, insurance, or lines of credit required to participate in the contract.		
Advertised in general circulation media, trade association publication(s), M/WBE-focused media for M/WBEs and areas of interest for this contract.		
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Name of Publications(s) 1. _____ </div> <div style="width: 45%;"> Date _____ 3. _____ Date _____ </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> 2. _____ Date _____ </div> <div style="width: 45%;"> 4. _____ Date _____ </div> </div>		
Notified, in writing, organizations which provide assistance in the recruitment and placement of M/WBE firms of the types of work, supplies or services considered on this contract. List the organizations, contractors' groups, local, state and federal disadvantaged business assistance offices and other organizations that were contacted for assistance in achieving the participation of M/WBE firms on this contract. Please note the name of the person contacted and the date of contact.		
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Organization _____ Organization _____ Organization _____ </div> <div style="width: 45%;"> Contact Person _____ Date of Contact _____ Contact Person _____ Date of Contact _____ Contact Person _____ Date of Contact _____ </div> </div>		

Firm Name _____

Prime Contractor's Authorized Signature _____

Title _____

Date _____

**CITY OF ST. LOUIS
BOARD OF PUBLIC SERVICE
CONTRACTOR'S GOOD FAITH EFFORTS REPORT**

CONTRACTING AGENCY: _____

PROJECT NAME: _____

NAME OF PRIME CONTRACTOR: _____

In addition to the minority or women-owned business enterprises listed and proposed for utilization on this contract, the following minority and women-owned business enterprises were also contacted regarding this contract. However, the prime contractor is unable to utilize these firms for the reasons listed below:

FIRM NAME ADDRESS, PHONE # CONTACT PERSON	BID ITEM(S) OF WORK TO BE PERFORMED AND/OR MATERIALS SUPPLIED	BID AMOUNTS	DATE AND METHOD OF SOLICITATION	COMMENTS: REASONS REJECTED

Prime Contractor's Authorized Signature	Title	Date
---	-------	------

**CITY OF ST. LOUIS
BOARD OF PUBLIC SERVICE
RECORD OF PAYMENTS TO SUBCONTRACTORS,
MATERIAL SUPPLIERS AND OTHER VENDORS**

CONTRACT NUMBER: _____ DATE _____
 PROJECT NAME: _____
 NAME OF PRIME CONTRACTOR: _____ PAY APPLICATION NUMBER _____

PROPOSED SUBCONTRACTOR OR SUPPLIER	MBE or WBE	PROPOSED SUBCONTRACT AMOUNT	PAYMENTS TO SUBCONTRACTOR OR VENDOR THIS PERIOD	PREVIOUS PAYMENTS TO SUBCONTRACTOR OR VENDOR	TOTAL PAYMENTS TO SUBCONTRACTOR TO DATE	SUBCONTRACTOR OR VENDOR PERCENT COMPLETE

In signing this form, the contractor certifies that the above amounts have been PAID TO all Subcontractors, Suppliers and vendors and that documentation for said payments is available for inspection.

Prime Contractor's Authorized Signature _____ Title _____ Date _____

**CITY OF ST. LOUIS
BOARD OF PUBLIC SERVICE
SUBSTITUTION FORM**

CONTRACTING AGENCY: _____
 PROJECT NAME: _____
 NAME OF PRIME CONTRACTOR: _____
 TOTAL CONTRACT AMOUNT: _____

In accordance with the City of St. Louis' Minority and Women-Owned Business Participation Program, when adding, changing or deleting subcontractors or suppliers on City projects, the City of St. Louis Substitution Form shall be used. All changes to the original list of approved subcontractors or suppliers shall be submitted to the contracting agency and SLDC for review and written approval prior to the use of any substitute contractor and/or supplier on a City project. Contractors shall make a good faith effort to replace M/WBE subcontractors or suppliers unable to perform on the project with another certified M/WBE firm.

1. Is the subcontractor/supplier being replaced an MBE or WBE? YES _____ NO _____
2. Type of work to be performed/material to be supplied: _____
3. Dollar Amount: _____
4. Name of the subcontractor/supplier being replaced: _____
 Contact Person: _____ Telephone No. _____
5. Percent of work/material that was completed /supplied by the subcontractor/supplier _____
6. Amount paid to the subcontractor/supplier (if any): _____
7. The reason the subcontractor/supplier is being replaced is stated as follows: _____

8. Document the efforts made to replace or add an MBE/WBE to perform the work/supply the required materials: _____

9. Name of substitute subcontractor/supplier: _____
 Check One: MBE _____ WBE _____ Contact Person: _____ Telephone No. _____

This form should be completed and submitted to the Project Manager when a subcontractor or supplier is being added, deleted or changed. The same criterion used for establishing good faith efforts in maximizing the participation of MBE/WBEs prior to awarding this contract will also apply to the substitution of MBE/WBE subcontractors or suppliers during the performance of the contract.

**CITY OF ST. LOUIS
BOARD OF PUBLIC SERVICE
FINAL RECORD OF PAYMENTS REPORT**

PROJECT NAME: _____

MBE GOAL: _____

CONTRACT NUMBER: _____

WBE GOAL: _____

FINAL CONTRACT AMOUNT: _____
(including Change Orders to Date)

The Final Record of Payments Report is completed by the contractor and submitted to the contracting agency and SLDC upon completion of the project. The report should reflect all activity, regardless of tier, on the project. If the M/WBE goal was not met, the contractor shall submit documentation supporting good faith efforts.

SUBCONTRACTOR OR SUPPLIER	MBE or WBE	WORK PERFORMED	TOTAL DOLLAR AMOUNT PAID TO SUBCONTRACTOR OR SUPPLIER

This certifies that \$ _____ has been paid to M/WBE Subcontractors or Suppliers as stated above.

By: _____
Name of Contractor

Per: _____
Authorized Signature

Subscribed and sworn to, before me, this _____ day of _____, A.D. _____

Notary Public: _____ My commission expires: _____

Exhibit 5
Wage Determination

General Decision Number: MO120051 01/13/2012 MO51

Superseded General Decision Number: MO20100111

State: Missouri

Construction Type: Building

County: St Louis City County in Missouri.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Modification Number	Publication Date
0	01/06/2012
1	01/13/2012

ASBE0001-006 10/03/2011

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	\$ 36.76	18.81

BOIL0027-001 01/01/2005

	Rates	Fringes
BOILERMAKER.....	\$ 27.69	16.53

BRMO0001-004 06/01/2011

	Rates	Fringes
BRICKLAYER.....	\$ 33.53	17.00

BRMO0018-006 06/01/2011

	Rates	Fringes
TILE FINISHER.....	\$ 26.87	11.32
TILE SETTER.....	\$ 30.15	12.18

CARP0008-012 05/05/2010

	Rates	Fringes
CARPENTER (Including Drywall Hanging & Form Work).....	\$ 33.23	12.25

CARP1310-001 09/01/2011

	Rates	Fringes
CARPENTER (Soft Floor Layer - Carpet & Vinyl Only).....	\$ 29.08	12.95

* ELEC0001-001 06/01/2011

	Rates	Fringes
ELECTRICIAN (Including Low Voltage Wiring Installer; Alarm, Computer & Telephone Installation).....	\$ 31.00	21.59

ELEV0003-001 01/01/2011

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 42.195	21.785+a+b

a. VACATION: Employer contributes 8% of basic hourly rate as
vacation pay credit for more than 5 years of service; and
6% for 6 months to 5 years of service.

b. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence
Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday
after Thanksgiving Day and Christmas Day.

ENGI0513-003 05/04/2011

	Rates	Fringes
OPERATOR:		
Backhoe/Excavator.....	\$ 29.11	21.36
Bobcat/Skid Loader.....	\$ 29.11	21.36
Crane.....	\$ 29.11	21.36
Forklift.....	\$ 29.11	21.36
Grader/Blade.....	\$ 29.11	21.36
Loader.....	\$ 29.11	21.36
Paver.....	\$ 29.11	21.36
Roller.....	\$ 29.11	21.36

IRON0396-001 08/04/2010

	Rates	Fringes
IRONWORKER, REINFORCING, ORNAMENTAL AND STRUCTURAL.....	\$ 31.98	18.20

LABO0042-001 03/02/2011

	Rates	Fringes
LABORER		
Common or General; Asphalt Shoveler; Brick & Cement/Concrete Mason Tender; Pipelayer.....	\$ 28.17	12.07

PAIN0002-001 09/01/2009

	Rates	Fringes
PAINTER		
Brush & Roller.....	\$ 29.58	11.75
Drywall Finishing/Taping....	\$ 29.58	11.75

PAIN0513-001 11/01/2010		
	Rates	Fringes
GLAZIER.....	\$ 31.68	24.32

PLAS0527-002 04/06/2011		
	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 28.70	14.56

PLUM0562-005 07/01/2011		
	Rates	Fringes
PIPEFITTER, Including HVAC		
Pipe Installation.....	\$ 34.25	22.43
PLUMBER, Excluding HVAC Pipe		
Installation.....	\$ 34.25	22.43

ROOF0002-001 03/01/2011		
	Rates	Fringes
ROOFER.....	\$ 28.65	14.77

* SFMO0268-002 01/01/2012		
	Rates	Fringes
SPRINKLER FITTER (Fire		
Sprinklers).....	\$ 37.83	19.85

SHEE0036-001 02/01/2011		
	Rates	Fringes
SHEETMETAL WORKER, Including		
HVAC Duct and System		
Installation.....	\$ 35.86	21.48

SUMO2010-050 06/14/2010		
	Rates	Fringes
OPERATOR: Hoist.....	\$ 26.02	13.01
PAINTER: Spray Only.....	\$ 17.78	0.00

TEAM0682-003 04/01/2011		

	Rates	Fringes
TRUCK DRIVER: Dump Truck.....	\$ 19.05	a+b

a.PAID HOLIDAYS: Christmas, Fourth of July, Labor Day, Memorial Day, New Years Day and Thanksgiving Day.

b.PAID VACATION: 1 week paid vacation after 2 years continuous service; 2 weeks paid vacation after 5 years continuous service; 3 weeks paid vacation after 10 years continuous service.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rate.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

Exhibit 6
Notice and Instructions Regarding Unauthorized Alien Employment

**NOTICE AND INSTRUCTIONS TO BIDDERS, RECIPIENTS AND SUBRECIPIENTS
REGARDING SECTIONS 285.525 THROUGH 285.550 RSMO
EFFECTIVE JANUARY 1, 2009**

Effective January 1, 2009 and pursuant to the State of Missouri's RSMO 285.530 (I), No business entity or employer shall knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri.

As a condition for the award of any contract or grant in excess of five thousand dollars by the state or by any political subdivision of the state (e.g., City of St. Louis, Missouri) to a business entity, the business entity (Company) shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. Every such business entity shall sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services. [RSMO 285.530 (2)]

The St. Louis Development Corporation acting on behalf of the Port Authority of the City of St. Louis, Missouri, in order to comply with sections 285.525 through 285.550 RSMO, requires the following bid and contract documents:

Required Affidavit for Contracts Over \$5,000.00 (US) - Effective January 1, 2009, Company shall comply with the provisions of Section 285.525 through 285.550 R.S.Mo. Contract award is contingent on Company providing an acceptable notarized affidavit stating:

1. that Company is enrolled in and participates in a federal work authorization program with respect to the employees working in connection with the contracted services; and
2. That Company does not knowingly employ any person who is an unauthorized alien in connection the contracted services.

Additionally, Company must provide documentation evidencing current enrollment in a federal work authorization program (e.g. a valid, completed copy of the first page of the E-Verify Memorandum of Understanding (MOU) identifying the employer and a valid copy of the signature page of the MOU completed and signed by the employer, the Social Security Administration and the Department of Homeland Security . *See attached sample*

- The City of St. Louis encourages companies that are not already enrolled and participating in a federal work authorization program to do so. E-Verify is an example of this type of program. Information regarding E-Verify is available at http://www.dhs.gov/xprevprot/programs/gc_1185221678150.shtm or by calling E-Verify: (888)-464-4218 or by e-mail at: e-verify@dhs.gov . E-Verify must be used for new hires only. It cannot be used to verify the employment eligibility of current employees.

**ST. LOUIS DEVELOPMENT CORPORATION
ACTING ON BEHALF OF THE PORT AUTHORITY
OF THE CITY OF ST. LOUIS, MISSOURI**

AFFIDAVIT OF COMPLIANCE WITH SECTION 285.500 R.S.MO., ET SEQ.
FOR ALL AGREEMENTS AND AWARDS IN EXCESS OF \$5,000.00
EFFECTIVE 1/1/2009

STATE OF MISSOURI)
) ss.
CITY/COUNTY OF _____)

Before me, the undersigned Notary Public, in and for the City/County of _____ ,
State of _____ , personally appeared _____ who is
_____ (Title) of _____ (Name of
company), (a corporation), (a partnership), (a sole proprietorship), (a limited liability company),
and after being duly sworn did depose and say:

(1) that said company is enrolled in and participates in a federal work authorization program with
respect to the employees working in connection with the contracted services; and

(2) That said company does not knowingly employ any person who is an unauthorized
alien in connection with the contracted services.

The terms used in this affidavit shall have the meaning set forth in Section 285.500 R.S.Mo., et
seq.

Documentation of participation in a federal work authorization program is attached to this
affidavit. (An example of acceptable documentation is the E-Verify Memorandum of
Understanding (MOU) - a valid, completed copy of the first page identifying the employer and a
valid copy of the signature page completed and signed by the employer, the Social Security
Administration and the Department of Homeland Security.)

By: _____

Print Name: _____

Title: _____

Date: _____

Subscribed and sworn to before me this _____ day _____ of, 20____.

Notary Public

Print Name: _____

My commission expires:

FEDERAL WORK AUTHORIZATION PROGRAM

What is E-Verify?

E-Verify is a free and simple to use Web-based system that electronically verifies the employment eligibility of newly hired employees.

E-Verify is a partnership between the Department of Homeland Security (DHS) and the Social Security Administration (SSA). U.S. Citizenship and Immigration Services (USCIS) oversees the program.

E-Verify works by allowing participating employers to electronically compare employee information taken from the Form I-9 (the paper-based employee eligibility verification form used for all new hires) against more than 425 million records in SSA's database and more than 60 million records in DHS immigration databases. Results are returned in seconds. Information regarding E-Verify is available at http://www.dhs.gov/xprevprot/programs/gc_1185221678150.shtm or by calling E-Verify: (888)-464-4218 or by e-mail at: e-verify@dhs.gov.

How Do I Register

An employer's participation in E-Verify is voluntary and is currently free to employers.

Users may access the Web-based access methods using any Internet-capable Windows-based personal computer and a Web browser of Internet Explorer 5.5 or Netscape 4.7 or higher (with the exception of Netscape 7.0).

To participate, an employer must register online and accept the electronic **Memorandum of Understanding (MOU)** that details the responsibilities of SSA, DHS, and the employer.

If your company wants to participate in E-Verify, as an E-Verify user, designated agent, or corporate administrator, or if your company is interested in the Web-service access method, select the "E-Verify Registration" link under "Related Links" on the right side of this page.

Frequently Asked Questions

Q : Why should I consider participating in E-Verify?

E-Verify is currently the best means available for employers to electronically verify the employment eligibility of their newly hired employees. E-Verify virtually eliminates Social Security mismatch letters, improves the accuracy of wage and tax reporting, protects jobs for authorized U.S. workers, and helps U.S. employers maintain a legal workforce.

Q : How do I register for participation in E-Verify?

You can register for E-Verify at <https://www.vis-dhs.com/EmployerRegistration>, which provides instructions for completing the registration process. At the end of the registration process, you will be required to sign a Memorandum of Understanding (MOU) that provides the terms of agreement between you the employer, the SSA, and USCIS. An employee who has signatory authority for the employer can sign the MOU.

Q : I am an employer with multiple hiring sites. Can one site verify everyone? How?

Yes, one site may verify new hires at all sites. When registering, the individual at the site that will be verifying new hires should select "multiple site registration" and give the number of sites per states it will be verifying.

Q : I am an employer with multiple hiring sites. Does every site need to enroll in E-Verify?

No, you can choose which sites to enroll.

Q : What is the required timeframe for conducting an employment eligibility check on a newly hired employee?

The earliest the employer may initiate a query is after an individual accepts an offer of employment and after the employee and employer complete the Form I-9. The employer must initiate the query no later than the end of three business days after the new hire's actual start date.

An employer may initiate the query before a new hire's actual start date; however, it may not pre-screen applicants and may not delay training or an actual start date based upon a tentative non-confirmation or a delay in the receipt of a confirmation of

employment authorization. An employee should not face any adverse employment consequences based upon an employer's use of E-Verify unless a query results in a final non-confirmation. In addition, an employer cannot use an employment authorization response to speed up an employee's start date. This would be unfair treatment to use E-Verify results to accelerate employment for this employee compared to another who may have received a tentative non-confirmation.

For example, Company X always assigns a start-date to new employees that is two weeks after the employee has completed an approved drug test. After the employee has accepted a job with Company X and after the employee and Company X completes the Form I-9, the company can initiate the E-Verify query. However, the company cannot speed up or delay the employee's start date based upon the results of the query (unless the program issues a final non-confirmation, in which case the employee should not be further employed).

Employers must verify employees in a non-discriminatory manner and may not schedule the timing of queries based upon the new hire's national origin, citizenship status, race, or other characteristic that is prohibited by U.S. law.